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OPERATION AND MAINTENANCE  
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SUB-ANNEX C-1  
OPERATION AND MAINTENANCE

C-1.1. **Appropriation Title.** This annex provides guidance for preparation of the program request for all Operation and Maintenance activities under the appropriation titles: Operation and Maintenance (O&M) and Flood Control, Mississippi River and Tributaries, Maintenance (MR&T) for the Program Fiscal Year.

This appropriation funds operation, maintenance, and related activities at the water resources projects that the Corps operates and maintains. Work to be accomplished consists of dredging, maintenance, repair, and operation of structures and other facilities, as authorized in the various River and Harbor, Flood Control, and Water Resources Development Acts.

SUB-ANNEX C-2  
PROJECT OPERATION AND MAINTENANCE

**C-2.1. Purpose and Scope.** This sub-annex provides policy and general procedural guidance for developing programs for the Project Operation and Maintenance (O&M), and National Emergency Preparedness programs. To provide a general framework and uniform approach for program development and justification, four funding increments have been identified. The various work items have been grouped by Work Category Code (WCC) for purposes of defining the appropriate funding increment. Guidance concerning automated data requirements for submittal of program recommendations is contained in paragraph 13 of the main body of the EC.

**C-2.2. Program Development Principles.**

a. **General Philosophy.** The Operation and Maintenance program path forward will incorporate new approaches to better reflect the performance outputs of the projects and a management philosophy that looks at the inter-relationships of the projects across business lines, within systems and for a long-term horizon. The key components of this new approach include:

- Use of a Systems approach, the linking of projects by Systems
- Mission performance
- Risk and Reliability, condition and consequences
- Five Year Development Plan
- Five Year Infrastructure Management Plans

(1) These areas of interest have been addressed in prior budget ECs but more and better use of such tools is needed to realize efficiencies of employing these management tools in our budgeting and program execution. Our program plans must be rolled up and examined holistically from a system and/or regional perspective to ensure consistent reliability, goals, mission execution, lowest sustainable investment levels and acceptable or shared risk levels are considered. The goal is to place all the projects on the same basis for the establishment of priorities based on benefits and risks.

(2) The O&M program should be developed from an asset management perspective which incorporates an emphasis on long range planning and return of value to the nation through the 5 year funding stream and Five Year Infrastructure Management Plans. The 5 year funding stream represents a comprehensive assessment of total investment requirements from all appropriation account (Investigations, Construction and Operations & Maintenance) while the Infrastructure Management Plans are currently focused on O&M program requirements. It is in the national interest for the Corps of Engineers to ensure reliable mission achievement at our operating projects in order to return value back to the nation. The projects were built to meet a national need through prioritized investment of Federal funds. In recognition of this, the Corps of Engineers maximizes the value return to the nation by ensuring reliable performance, and maximum sustainable operating life at the lowest sustainable level of investment.

(3) The 5 year funding stream and Five Year Infrastructure Management Plans represent the collective technical judgment of the Operation & Maintenance Community of Practice, Business Line Managers, and the Engineering & Construction Community of Practice with regard to optimal asset replacement cycles, and best operation and maintenance practice. Investment requirements are informed by asset condition assessments and failure risk assessments which affect estimates of

remaining equipment life, future maintenance and repair requirements and re-capitalization plans. Equipment condition, failure risk and replacement cycles affect the O&M requirements and should be accounted for within Five Year Infrastructure Management Plans. Asset life extension through prudent O&M practice can provide return to the nation beyond the originally expected life of the project and serves the public interest. In addition, ensuring that our stewardship of these assets is accomplished at the lowest sustainable investment level maximizes the net value returned from our missions.

(a) Established Criteria is defined as the standard with specific guidelines which are formulated by the Administration which clarify and describe "justified levels of service."

(b) Justified Level of Service is defined as the delivery of a supportable and defensible amount or degree of project benefits consistent with authorization, use, and administration policies.

(c) Lowest Sustainable Investment is defined as the lowest investment level that a prudent manager would select, balancing between short and long term economics and considering overall availability of resources. Sustainability is key in that we still ensure the project meets or exceeds project life expectations and meets or exceeds changing environmental requirements for compliant operation.

b. **Budgeting by Systems.** The O&M plan to date has grouped individual projects by "basin codes" for geographically defining projects into regions. The Systems approach further refines the collection into systems that are functionally based. The hierarchy of order are the Systems with the Hydrological Unit Code (HUC) sub-regions assigned to the Systems. The initial set of Systems has been developed to consider the multiple purpose aspects of the O&M program. The National Academy of Public Administration's report "Prioritizing America's Water Resources Investments: Budget Reform for the Civil Works Construction Projects" illustrated that our individual project budget approach would not adequately address system failure of the New Orleans levee system because only a few levees failed while the majority of pieces of the system were effective...the weakest link concept. On a positive note, a system analysis could achieve contract efficiencies not realized in an individual project approach. The program is to be formulated on less consolidated projects or systems than previously presented. The 21 USGS Regions presented in FY07-08 are too broad for this purpose. **See Table C-5.1** for the O&M Systems that will be used in the PY. We will continue to assign projects to a HUC Sub-Region using the 4-digit code. The HUC Sub-Regions have been assigned within the initial list of O&M Systems that are further aggregated into 14 regions.

(1) The Systems have been developed using a standard, rational, logical approach, considering all business purposes.

(2) Each System has the HUC sub-regions assigned. Some HUC sub-regions are included in more than one System. All projects in a HUC sub-region do not have to be assigned to one System, but should be assigned to the System that it belongs.

(3) The end result is a set of Systems for O&M, with the HUC sub-regions and Corps of Engineers O&M projects assigned.

(4) "Regions" have also been associated with the Systems to allow greater aggregation. These regions generally match the RBCs.

c. **Five and Ten Year Plans.** Basic design criteria for water resources improvements generally include estimates of repair and replacement frequency and effective project life. Major costs such as spillway gate replacements, navigation lock gate replacements, hydroelectric power generator rewinding

and turbine replacement certainly need to be anticipated. Construction completion schedules for additional projects coming on line also need to be incorporated within O&M budgets (in some cases re-capitalization replaces equipment with better technology that requires lower O&M needs, but may not be as robust and therefore shortens re-capitalization cycles). However many projects in the Corps inventory are long past their design life. A strategy to formulate long range maintenance funding plans must take into account unforeseen risk from fluctuations in weather conditions such as hurricanes and other major storms which often impose sudden, unanticipated requirements for maintenance and service restoration. Prediction of operational requirements requires consideration of equipment condition assessments, shifting public needs or areas of emphasis, geographic shifts driven by regional trends in commercial activity and other economic factors. And, finally, national priorities for federal investments are subject to frequent and radical fluctuations. Accordingly, the 5 year funding stream and Five Year Infrastructure Management Plans must not only be developed as a project-specific long-range plan, but also be based on sub-plans recommended by business lines. In addition, these project plans must be rolled up and examined holistically from a regional and/or system perspective to ensure consistent reliability goals, mission execution, lowest sustainable investment levels and acceptable or shared risk levels are taken into consideration.

**d. Mission and Systems Performance.** In prior years, we strived to develop performance metrics based on output performance. A Corps-wide discussion of these outputs is scheduled for later in 2007. Progress in the development of those metrics would need to be furthered later in the PY budget development or in the FY10 budget. Our budget and system performance plans must account for performance output dependencies. For example, closure of one lock in a system would affect other lock passages or reservoir operations on one project could affect other downstream reservoirs. Consideration of systems in the operation and functioning of our projects will achieve better service to the public.

**e. Risk and Reliability:** – Relative Risk Matrix (RRM). Project performance is not a consistent assured output. Project conditions have inherent risk and reliability that affect the performance outputs. The FY08 budget EC required a first cut at assigning a risk evaluation of our budget packages. The risk and consequence evaluation methodology should be based, similar to that done for Dam Safety analyses, in the evaluation of facility conditions (risk) against the consequence of failure (consequence or performance). A Relative Risk Matrix would allow a consistent approach to risk/consequence. Work packages to preclude failure of high consequences would be readily apparent. This matrix would assist in the prioritization of work/budgeting. The analysis is to propose common, risk-based economic and life safety metrics for projects that protect life and property. These should be consistent with the construction program's dam safety assurance projects, dam and levee seepage control projects, static instability correction projects, and deficiency correction, reconstruction, and new construction projects for flood and coastal storm damage reduction efforts. The goal is to place all the projects on the same basis for the establishment of priorities based on benefits and risk.

**f. Infrastructure Management Plan.** The Infrastructure Management Plan (IMP) brings the management tools above together in laying out prioritized risk and performance based work over a short and long term to achieve desired end-state performance metrics. The synergy of system development could require budgeting certain tasks in the same timeframe. For instance dredging contracts for projects A and B could be advertised together if conducive to a joint solicitation to obtain better bids or electrical panels in two nearby reservoirs could be more optimally scheduled. The management plans should also lay out periodic dredging requirements that can be projected for out-year budgets to assure annual system outputs and stakeholder buy-ins (recognizing budgetary rules and inability to commit to future budgets). This could identify a higher budgetary priority and more system outputs for lower use projects that require infrequent investments. For example, a project with 400,000 tons moved annually but dredged every 5 years could be a better investment than a project with higher annual tons but dredged

each year. For example, for Navigation the plans would include all harbor maintenance work that is justified by the resulting commercial transportation savings or by benefits to subsistence use, public safety, or public transportation as described in the Navigation appendix. The IMP is to cover the period FY 2009-2013 and be modified annually for subsequent budget submittals. The Infrastructure Management Plan will be consistent with the 5 year funding stream including the PY Budget Request. The Infrastructure Management Plan will be based on sub-plans developed by Business Line Managers for six primary missions (Flood & Storm Damage Reduction, Navigation, Environmental Stewardship, Water Supply, Hydropower, and Recreation). The Infrastructure Management Plan should be jointly developed and improved within the Operations Community of Practice. The Infrastructure Management Plan must reflect sound engineering, construction, operation and maintenance state of practice (reliability centered maintenance, condition assessments, equipment mortality studies, predictive maintenance, etc.) and continually honed to achieve the lowest sustainable O&M investment level. Accelerated replacement cycles within the 5 year funding stream may affect O&M needs within the Infrastructure Management Plan (i.e. replacement versus continuing high outage and repairs on failing equipment). The O&M budget submission should be consistent with the 5 year funding stream and the Infrastructure Management Plan. The 5 year funding stream and Infrastructure Management Plan both reflect planned investments for a long range five year period.

For the PY, each MSC will develop a proto-type IMP for one System. The IMP should not be for the most complex System and conversely not for the simplest System. These IMPs will be evaluated and used to develop the template to be applied for all Systems.

An IMP will be developed for the O&M Systems implemented in this EC. Each IMP will identify the current performance level or target and the 5 year end-state performance target. Ultimately, the overall end-state performance could be beyond the five-year planning horizon. For example, it may take more than five years to reach the target of reducing unscheduled closures at a navigation lock. The IMP should consider the various business activities performed within the System. Each Business Line will have a section to itself, and the IMP will have a summary section addressing comprehensive O&M activities. The relationships of the different business lines to each other should be addressed. For example, the dam at a project not only serves to create a navigation pool, but it is also used for municipal water supply and for water-based recreational opportunities. The IMP will include the major assets or features of the System and the relationship of the assets to the business lines. It will include the performance metrics and targets for the different business lines. The IMP will identify the risk and reliability factors for the major assets based on the different business lines condition assessments, with the condition and consequences addressed. The IMP will address different funding scenarios, such as a likely level to maintain the current condition, an optimal level to begin addressing the most critical items to begin increasing performance, and a "recommended" or elevated level to address critical condition needs, to buy down risk at a faster rate. The funding will be tied to achieving the targeted end-state for performance for the five years. The IMP will include stakeholder coordination and expectations. The MSCs will coordinate with other MSCs if required. For example, the IMP for the Mississippi River should address the relationship and impacts of the Missouri River as it is a provider of water flow to that waterway.

The IMPs submitted for PY will be used to develop a standard format template for future use for IMP.

Each MSC will present to HQUSACE and ASA(CW) their individual IMP on 21 August 07.

g. **Dam Safety.** Most Dam safety related work items are below. Site specific conditions must be considered when determining costs for each project, following collaboration between the District Dam Safety and Operations experts. The table is a guide to cover many recurring dam safety program activities. However, it is not a comprehensive list and additional dam safety work items may be programmed.

O&M funded dam safety actions shall be prioritized based on risk. Budgeted dam safety items consider the performance history, potential failure modes, and severity of adverse consequences associated with each operating project.

Operating projects which have been evaluated under the Screening for Portfolio Risk Assessment (SPRA) process shall identify the Dam Safety Action Classification assigned by HQUSACE. **See ANNEX B CONSTRUCTION AND FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES - Dam Safety Assurance & Seepage/Stability Correction Program, paragraph B-2.5, Table B-1 for DSAC definitions.**

**Dam Safety Work Items/Activity:**

Minimum Instrumentation Data Collection & Evaluation  
Supplemental Instrumentation Data Collection & Evaluation  
Emergency Action Plan Notification List Updates  
Emergency Action Plan Revisions  
Dam Safety Emergency Exercises  
Interim Remedial Measures Planning (e.g. Coordination for Operating Restrictions)  
Inundation Map Updates  
Seismic safety Re-evaluations  
Hydrologic Reevaluations  
Hydraulic Steel Structure Inspection & Testing  
Periodic Inspections (PI)  
Physical Surveys in Support of PIs  
Stilling Basin Inspections in support of PIs  
Sedimentation Studies  
Tainter Gate Testing  
Dam Safety Training  
Water Control Management Studies  
O&M Manual & As Build Drawing Updates  
Project Security Plans  
Instrumentation Repairs & Replacement  
Foundation Drain Cleaning  
Critical Relief Well Maintenance  
Other Relief Well Maintenance  
Dam Safety Program Tool data Updates  
Screening for Portfolio Risk Assessment ( Each District shall screen 35% of their inventory in FY 09)

h. **Inspections of Completed Work (ICW)** - Flood Damage Reduction and Federally Authorized Shore Protection Systems and the Levee Safety Programs. This section provides guidance to develop the PY budget activities for these Programs operated and maintained by non-Federal sponsors, who have responsible for operations, maintenance, repair, replacement and rehabilitation (OMRR&R). Guidance contained in the EC will be used in conjunction with current program implementation guidance when preparing budget submissions for PY for the following inspection program accounts:

- Inspection of Federally authorized, locally maintained Systems under the Inspection of Completed Works (ICW), Operation and Maintenance, General (O&M), appropriation category;

- Inspection of Federally authorized, locally maintained Systems under the Inspection of Completed Works (ICW), Flood Control, Mississippi River & Tributaries (MRT), appropriation category;

- Inspection of non-federal Systems under the Rehabilitation and Inspection Program (RIP), Flood Control and Coastal Emergencies (FCCE) appropriation category.

(1) Operations and Maintenance (O&M) funding of federally maintained levee safety actions or authorized Hurricane Shore Protection Systems shall be prioritized based on risk. Budgeted safety items consider the performance history, potential failure modes, and severity of adverse consequences associated with each operating project. Inspections of Federal and Non-federal protection systems will be performed in accordance to current policies and direction as established by HQUSACE. Existing site conditions must be considered when determining costs for each project, following collaboration between the District ICW and Levee Safety Program Managers and Operations experts.

(2) Beginning in the PY the type of inspections conducted and the inspection intervals for all flood damage reduction Systems in the ICW, MR&T and RIP inspection programs will be in accordance with the inspection intervals shown in Table C -1. For the PY budget submission districts should assume that all national levee database GIS data collection activities and Phase I & II I-wall analyses requirements will have been completed and that System risk assessments will be centrally funded by HQUSACE. Budget Increment guidance for Levee Safety Program inspection activities are at Appendix III-5, Budget Increments and Ranking.

<b>Table C-1</b> <b>Inspection Intervals &amp; Budget Criteria</b> <b>For</b> <b>Flood Damage Reduction Systems</b>			
<b>Current Land Use in the Protected Area*</b>	<b>Project Design Event</b>	<b>Interval of Inspection**</b>	<b>Type of Inspection<sup>5</sup></b>
Urban/Rural/Agricultural <sup>1</sup>	100 year event or greater	Annual	Routine
		5 yr	Periodic Inspection <sup>2</sup>
		TBD <sup>3</sup>	Risk Assessment <sup>4</sup>
Urban/Rural	50 to 99 year event	Annual	Routine
		5 yr	Periodic Inspection <sup>2</sup>
		TBD <sup>3</sup>	Risk Assessment <sup>4</sup>
Urban/Rural	10 to 49 year event	2 year	Routine
Agricultural	5 to 99 year event	2 year (rating dependent)	Routine
* For combined urban, rural, and agricultural levee systems the higher standard governs. ** Consider more frequent interval for levee with water on it all of the time. 1. This applies to high economic consequence agricultural regions. 2. Federal Projects/Systems only. 3. 1 <sup>st</sup> round of risk assessments will be centrally funded by HQ, but the districts will have to program per HQ direction.			

4. Risk Assessment for non-Federal Projects only if directed and funded by Congress; Initial Risk Assessment for the Federal Projects will be budgeted by Corps Headquarters.
5. For increment funding levels see Appendix III, "Flood and Coastal Storm Damage Reduction Business Line"

i. **Relationship to Program Execution.** Good program execution is an essential ingredient in securing the resources needed to ensure a viable O&M program and thereby continue to provide the Nation with the benefits for which water resources projects were constructed. Performance of the program is assessed through the Office of Management and Budget's ExpectMore.gov process. Together with OMB, the performance of the program will be assessed and accountability for improvement managed to assure the program is working well for the American people. The Program Assessment Rating Tool, or PART, for short, is a questionnaire designed to help assess the management and performance of programs. It is used to evaluate a program's purpose, design, planning, management, results, and accountability to determine its overall effectiveness. Therefore, development of the program is directly related to program execution. It is imperative to develop a sound and realistic program that can be executed as scheduled in accordance with commitments to customers. The programming process described in this annex has been designed to facilitate both program development as well as execution. If the procedures outlined in this annex are implemented in a consistent manner throughout the Corps, the result should be: (1) a credible program that can be defended within the Administration and Congress, (2) a sufficient allowance of O&M funds and (3) a high degree of fiscal performance.

j. **Operations (Work Category Codes 601XX-608XX).** All operations features should be closely examined minimize the required investment levels to reduce costs wherever possible. While there may be some cost fluctuation in investment needs among individual projects, the goal is to reduce, or at least constrain, the aggregate total growth of operations costs in the MSC to no more than inflation. Efficiency improvements should be employed to reduce operations costs, where possible.

k. **Maintenance (Work Category Codes 611XX-618XX).** Prudent stewardship of available resources is essential to preserve the existing infrastructure. The growing and aging inventory of projects with a resources constrained environment necessarily dictates that resources be concentrated on the most prudent and necessary maintenance features of the program to the maximum extent possible. Just as with operations, the maintenance features should be reviewed and efficiency measures employed to reduce investment needs to the lowest sustainable level.

l. **Priorities.** The MSC and district commanders must ensure that the program request provides balanced and equitable treatment to all Business Lines (Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply) from a regional, system and watershed perspective.

m. **O&M Cost Savings Initiative.** This initiative is a methodology that has been developed to reduce the cost of operating and maintaining the Nation's water resources infrastructure, while still providing justified levels of project services. This cost reduction initiative, along with other locally generated cost saving measures, and using a Systems approach should be used to seek more efficient operation and maintenance of projects and to help reduce costs. The savings generated by these initiatives would be applied toward reducing the inventory of unfunded maintenance. All Business Lines should be continually reviewed to achieve cost savings under these initiatives.

### C-2.3. Program Development and Review Process.

a. **Work Category Codes (WCCs).** The Civil Works O&M program development process reflects the Corps compliance with the requirements of the Government Performance and Results Act of 1993 (GPRA). Therefore, the program will be submitted in a form that reflects the primary business processes/functions established for the O&M mission. These Business Lines are Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply. In addition, each budget activity will be tied to a business performance measure and goal for the program year. The Work Category Codes (WCCs) are aligned by the operation and maintenance areas and by the primary Business Lines within the operations or maintenance areas. The tables are provided in Sub-Appendix D-4 to aid in developing budget activities aligned with appropriate Business Lines, WCCs and sub-WCCs.

(1) Table C-4.1 lists WCCs and sub-WCCs in numerical order.

(2) Table C-4.2 lists WCCs and sub-WCCs in alphabetical order.

(3) Table C-4.3a is a matrix that displays the operations Work Category Code structure by each Business Line (embedded Excel file).

(4) Table C-4.3b is a matrix that displays the maintenance Work Category Code structure by each Business Line



Table 4.3ab.xls

(5) Table C-4.4 describes and defines each WCC for operations activities.

(6) Table C-4.5 describes and defines each WCC for maintenance activities.

#### **b. Joint Activities – Joint Costs.**

(1) Joint Activities are activities that cannot be assigned to one specific Business Line at O&M multipurpose projects with power (Cat/Class 300) with multiple authorized purposes. Joint Cost is the cost assigned to Joint Activities. At non-Cat/Class 300 projects, activities previously considered as “Joint Activities” will be included in the project's predominant business line.

(2) The districts will use P2-Primavera Project Manager to assign the appropriate Work Category Codes to request funds for joint operations activities and for joint maintenance activities at Cat/Class 300 multipurpose with Hydropower projects ONLY. Districts must ensure that joint activities are only assigned to the Hydropower Business Line in P2. The districts must also ensure joint activities are assigned the appropriate phase code (OJ or MJ) in P2 and are placed in the appropriate increment. Joint activities designated as operations and maintenance at multipurpose Cat/Class 300 projects should use Work Category Codes of 606XX for operations and 616XX for maintenance.

(3) The Hydropower business line will contain two sub-ceilings for O&M activities: hydropower specific and hydropower joint for Cat/Class 300 projects. The Hydropower Business Line Managers at each level will manage all Cat/Class 300 joint activity budget items to ensure accountability of joint activities across business lines. A joint ceiling will be established by HQUSACE that represents the

program's sum total of the O&M joint activities. Each MSC is responsible for ensuring that the most critical O&M joint activities are included in the Initial Increment at Cat/Class 300 projects. These joint activities will be ranked separately by the Hydropower Business Line Manager with input from other Business Line Managers as appropriate. Before submittal of the O&M budget to OMB, joint costs will be "displayed" as business line costs based on the current statutory cost allocation table in P2. However, the joint cost package will NOT be split and allocated across business lines within P2, but will instead remain as a single package or budget activity within the Hydropower Business Line.

**c. Performance-Based Programming.** Performance measures are described in the Appendices for the Business Lines. Performance data according to these measures will be entered in OFA for each budget item for which funds are requested as explained in paragraph 11 of the main body of this EC. In addition, in accordance with paragraph C-2.16, each budget item will be assigned to a Business Line increment. The districts may cite different performance levels in the funding arguments for different budget activities. For example, funding of the highest priority budget item in the Business Line initial increment may be required to attain 80 percent availability; funding of the next highest priority budget item in a subsequent Business Line increment may enable the project to attain 95 percent availability.

**d. Risk-Based Condition Assessments.** Risk-based and reliability condition assessments are described in the Business Line appendixes.

**e. Use of Work Category Codes to Program for Business Lines.** The Work Category Codes are listed as follows:

- 601XX Operation for Navigation Function
- 602XX Operation for Flood Damage Reduction Function
- 603XX Operation for Hydropower Function
- 604XX Operation for Environmental Stewardship Function
- 605XX Operation for Recreation Function
- 606XX Joint Activities for Operations (Cat/Class 300 projects only)
- 607XX National Emergency Preparedness Program Function
- 608XX Operation for Water Supply Function
- 611XX Maintenance for Navigation Function
- 612XX Maintenance for Flood Damage Reduction Function
- 613XX Maintenance for Hydropower Function
- 614XX Maintenance for Environmental Stewardship Function
- 615XX Maintenance for Recreation Function
- 616XX Joint Activities for Maintenance (Cat/Class 300 projects only)
- 617XX Reserved
- 618XX Maintenance for Water Supply Function

The programming process will allow the estimated costs for a Business Line to be identified. For example:

(1) A Cat/Class 100 Navigation project would have all of its primary purpose budget activities programmed under the 601XX and 611XX WCCs. These WCCs will identify the total navigation costs for the Navigation Business Line at this project. Separable costs specific to the Recreation and Environmental Stewardship Business Lines would be charged to the WCCs for those business lines.

(2) A Cat/Class 200 Flood Damage Reduction project with Recreation and Water Supply as authorized project purposes would have all its primary purpose budget activities programmed under the 602XX and 612XX WCCs. All Recreation-specific budget activities would be shown in 605XX and 615XX WCCs for Recreation, as appropriate. All Water Supply-specific budget activities would be shown in 608XX and 618XX WCCs for Water Supply, as appropriate. Work Category Codes 60210 and 60221 will no longer be used for Water Supply activities.

(3) A Cat/Class 300 Multiple Purpose Project with Power will have its specific Hydropower budget activities shown under the 603XX and 613XX WCCs. Budget activities representing specific activities for Navigation, Flood Damage Reduction, Recreation, Environmental Stewardship, or Water Supply will be budgeted under the WCCs for those specific business lines. The budget for Joint Activities (work which cannot be assigned to a single business line) will be shown under the 606XX and 616XX WCCs and will be coded as an "OJ" or "MJ" phase code. This allows Joint Activities at a project to be entered and managed as a single budget activity. The total budgeted amount for Joint Activities can later be "displayed" across specific Business Lines in accordance with the statutory O&M joint cost allocation formula. This "display" of joint costs will not result in a single budget activity being split into multiple activities across multiple business lines. However, this "display" of programmed costs allows the Corps to identify the specific costs for Hydropower O&M, plus that portion of the costs for Joint Activities allocated to Hydropower. This is important because the Federal Power Marketing Administration generally reimburses the Treasury for the power costs incurred by the Corps, which includes the portion of Joint Activities that can be allocated to Hydropower. Following is an example of a joint budget activity at a Cat/Class 300 project: During the programming process, a roof repair budget activity for an administration building at a multipurpose project would have the entire programmed cost entered under a single budget activity under WCC 61610. (Note: Power cost repayment accounting is a separate activity and should not be confused with the programming and execution WCC procedures.)

f. **O&M Power Costs in the Pacific Northwest.** Pursuant to the 5 December 1997 Memorandum of Agreement between the Department of Energy, acting by and through the Bonneville Power Administration (BPA), and the Department of the Army, entitled "Direct Funding of Power Operations and Maintenance Costs at Corps Projects", BPA will direct fund O&M Power Costs for Corps projects with hydroelectric power generation facilities for which BPA is the designated Federal power marketing agency. O&M Power Costs include hydropower-specific O&M costs, the power portion of joint O&M activities, and power capital items. The Northwestern Division will prepare an Annual Power Budget in conjunction with the Bonneville Power Administration that specifies O&M Power Costs for each applicable project. A five year Power Budget which includes annual power budgets for five consecutive fiscal years will be developed in conjunction with the Bonneville Power Administration by the Northwestern Division for purposes of inclusion in the BPA rate base and to fund the Corps O&M power costs. O&M Power Costs in the Pacific Northwest will be entered into P2-Primavera Project Manager under a separate type of funds classification (Bonneville Power Appropriation), and submitted concurrently with the O&M program submittal to HQUSACE, in the appropriate funding increment. In addition, budget activities for joint activities will be split into two budget activities to reflect the appropriate allocation of joint activity costs between the O&M and O&M Power Cost appropriations. Budget activities for the power portion of large capital joint activity costs require specific dispensation from ASA(CW) to be funded within the O&M appropriation.

g. **Budget Activities - Primary and Supporting Costs.** In developing a budget activity, all costs required to accomplish the work should be included. This includes the cost of the primary activity as well as all supporting activities that are required to accomplish the work. For example, a dredging budget activity should contain the cost of the actual dredging process plus the costs for before and after

surveys, engineering and design, real estate requirements, contract supervision, water quality monitoring, etc. In this way, a complete and stand-alone decision package is developed, thereby avoiding situations where the primary work is funded without the necessary supporting activities, or vice versa. This process applies to all WCC-based budget activities.

h. **Operation and Maintenance Budget Activities.** A continuing effort is required to standardize designations of budget activities as either operation or maintenance-related. To provide uniform guidance for the appropriate placement of such budget activities within operation or maintenance Work Category Codes, detailed definitions of the operation and maintenance elements of each WCC are provided in **Table C-2.4**. In addition to these definitions, the following general principles should be applied. Operation budget activities may include maintenance that is of a recurring nature, and is integral to continued project operation. Examples include things such as custodial services, removing ice and snow, debris, trash, cleaning; relamping lighting fixtures, routine testing of lubricating and hydraulic oils; replacing packing in valves and glands; replacing electrical brushes and touch-up painting, etc. This work is performed on an annual basis, typically by hired labor or small contract (service contract, purchase order, etc.). All other maintenance work, specifically, non-recurring and non-routine maintenance, should be placed under maintenance Work Category Codes. It is the nature of the work itself which dictates where it should be placed. That is, annual recurring costs for annual recurring work, such as custodial services, belongs under operations Work Category Codes, while annual recurring costs for non-recurring work items, (e.g., minor roof repairs one year, placing signs and markers, painting of guardrails, wall striping, repainting comfort stations, etc.), belong under maintenance Work Category Codes.

i. **Appropriate Levels of Budget Activity Justification.** In a performance-based program, every budget activity must relate to an improvement in performance or results, that is, in the outputs or outcomes created by the Business Line. These linkages and the necessity of the budget activity to performance goal attainment must be made clear to all levels of reviewers, both internal and external (e.g., OMB or Congress) to the Corps. The impacts of the budget activity on specific areas of customer service, project performance, infrastructure investment, personnel or public safety, the local community, statutory requirements, or other considerations should be included in the funding argument if not covered in the performance measures.

j. **Well-Written Descriptions and Funding Arguments.** Care should be taken to write all descriptions and funding arguments clearly and concisely so that the reader can understand and appreciate the work for which funds are being requested. Well-written justifications are essential to convince reviewers who are not familiar with the work to fund your needs.

**C-2.4. Funding Considerations.** Several adjustments are made to your program after it has been submitted to HQUSACE based on coordination with ASA(CW) and OMB staff. These adjustments depend upon what is included in your program. The MSC's should ensure that every legitimate O&M need is included and properly prioritized within each Business Line so that their final program is based on the complete needs of the MSC.

**C-2.5. Special Interest Items.** In order to highlight specific activities, the following special interest items have been defined. HQUSACE may add to or delete special interest items as needed in each Program Year. Special interest items are not additional funding levels and any given budget activity may fall into all, none, or any number of special interest item categories. Activity codes have been added to P2-Primavera Project Manager for each special interest item required for the PY budget.

Table C-2-1 Special Interest Items
Environmental Management Systems
Correction of Significant Environmental Compliance Findings

A description of each of these special interest items follows:

a. **Environmental Management Systems.** Items related to implementation and/or operation of Environmental Management Systems (EMS) are to be highlighted in order to track budgeting and execution of budget activities for EMS related work. These EMS items will be recorded using the appropriate existing Work Category Codes in accordance with current practice, and will be tagged with this special interest item indicator code.

b. **Correction of Significant Environmental Compliance Findings.** Items related to corrective action for a significant environmental compliance finding are to be tagged using this special interest item indicator code.

**C-2.6. Operation and Maintenance Unfunded Requirements Reporting Requirements.** District and MSC offices are encouraged to develop complete operation and maintenance programs so that they might better anticipate future program management requirements. It is important that all justified requirements funded or unfunded, be identified, so that in the event that additional resources are made available for infrastructure preservation, appropriate funding prioritization decisions can be made about budget activities which may originally have appeared to be below the funding level. Identification of unfunded requirements is critical in order to understand and quantify the condition of the water resources infrastructure, and the quality of associated services. It is equally important that the identified unfunded requirements be a realistic assessment of requirements, and not a "wish list" of nice-to-have enhancements. All requirements within district capability should be included (i.e. they must be executable within the Program Year).

a. **Unfunded Requirements.** Unfunded Requirements are defined as those unfunded operation and maintenance work items which are required and should have been funded in the PY in order to provide reasonable assurance that project performance goals can continue to be met and that undue risk of failure is avoided. It may occur in any Business Line and is not limited to infrastructure-related budget activities. Deferred maintenance of a project feature or deferred update of a project exhibit for instance, may both be valid examples of unfunded requirements.

b. **High Priority Unfunded Requirements.** High Priority Unfunded Requirements are a primary concern of respective congressional delegations. MSCs need to be prepared to provide a prioritized listing of unfunded requirements if additional resources were to be made available.

**C-2.7. Cost Estimates.**

a. **Projections.** Field offices will compute costs based on PY-1 cost projections. All cost estimates will be projected to levels based on inflation factors and assumptions provided in the main part of this EC.

b. **Rounding.** All cost estimates shall be rounded to the nearest one thousand dollars (\$1000). Because of serious complications in aggregating functional, regional and national summaries, it is imperative that everyone at all levels strictly adhere to this requirement without exception.

#### C-2.8. **Rank Assignments.**

a. **Work Groupings.** The smallest increment of work for O&M programming purposes is a work item or task. Examples of tasks are trash pickup at a recreation area, mowing a levee, or painting a lock gate. In P2 tasks at the same project and within the same Work Category Code may be grouped into budget activities if they are of comparable criticality or priority, for example, maintenance of 15 of 30 recreation sites during May through September or painting lock gates at locks 1-4.

b. **Rankings.** As described in paragraph C-2.16, budget activities in each Business Line will be assigned to a maximum of four Business Line increments. Ranking of individual budget activities will be assigned by the district and MSC within each Business Line. For each project all Increment 1 budget activities will be ranked higher than the budget activities in the next-added Business Line increment. A budget activity in the next-added increment for a high value project/activity can be ranked higher than the initial increment budget activities at less valued projects/activities. To better ensure appropriate rank, each budget activity will contain a code indicating the Business Line increment where the budget activity belongs.

c. **Final Rankings.** Development of final rankings should be an iterative process that employs all the knowledge and support tools available to the decision maker. In developing the national program, HQUSACE will generally rely on the final rankings assigned by the MSC in OFA provided they meet the business line increment definitions and overall policy. It is therefore important that rank assignments be made in accordance with the relative importance of the work so as to ensure that the highest priority activities can be accomplished within available resource limits. Ranking of work items within the business line increments will follow the priorities for operation and maintenance work items. Each budget activity should be assigned to the appropriate Business Line increment based on consistent and objective application of the Business Line increment definitions and performance measures established for the applicable Business Line. See Business Line Appendices for guidance on ranking budget activities for each program.

C-2.9. **Navigation Projects.** Beginning in FY 1987, all shallow-draft harbors previously financed as a part of a through-waterway in the inland river systems were, and will continue to be, programmed as separate projects. These projects include all activities on each spur or side channel of the old project and exclude only those activities on the main through channel.

C-2.10 **Bridge Performance.** Bridges are vital to the nation's highway and transportation systems, especially high-level highway bridges over waterways and canals. Bridges are also mission critical for flood damage reduction projects as well as for public access in our recreation and environmental stewardship lands. The criteria used to prioritize the funding of maintenance of Corps-owned bridges include (1) Federal Highway Administration's (FHWA) Sufficiency Rating, (2) Mission Critical Bridge Structures, such as service bridges to dam control towers (3) Environmental Issues, such as lead based paint remediation, (4) Life and Public Safety Concerns and (5) General Bridge Condition Appraisals.

C-2.11. **Marginal Projects.** For projects, or segments of projects, that have marginal benefits, special care should be taken to ensure that all resource requests are economically justified. If sufficient study detail is not yet available to develop appropriate funding recommendations, program requests should be

held to levels below historic amounts. Major repairs not essential to structural integrity in the PY should be postponed. Operation activities should be constrained to the lowest level possible.

**C-2.12. Evaluation Reports.** Dredged Material Management Plans (DMMP's) for dredged material disposal facilities at operating navigation projects will be funded in the O&M account. Evaluation Reports and/or assessments for deficiency correction, and Rehabilitations and Replacements are funded in the O&M account.

**C-2.13. Cultural Resources.** (NAGPRA/Curation). Funding requirements for activities to ensure compliance with Section 5 – 7 of the Native American Graves Protection and Repatriation Act (NAGPRA) (PL 101-601) and with 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, will be budgeted as a Remaining Items activity thus should not be included in the general MSC program submittal. Specific guidance on program year activities will be provided in annual guidance by the Mandatory Center of Expertise (MCX) on how and when to make requests for funding of activities to ensure compliance with Section 5 – 7 of NAGPRA and with CRF Part 79. All of the requirements will be aggregated by the MCX into the program as a separate line item. All annual maintenance curation costs and cultural resource management costs, other than NAGPRA, should be included in the appropriate Work Category Code, within project work packages.

**C-2.14. Special Recreation Use Fees (SRUF).** Funds generated from collecting recreation use fees are returned in O&M appropriations for operation, maintenance and improvement of recreation sites and facilities. The construction of new recreation facilities or renovation and/or improvement of existing facilities may be accomplished with these funds if the goal of providing quality public recreation experiences with the most cost efficient management of water resource development projects can be met. Overall budgetary limitations should be carefully considered in determining what activities will be financed with these funds. Routine operation and maintenance of existing sites and facilities should not be compromised to finance new construction or facility improvements. SRUF funded work previously programmed in WCC 60512 and 61512 should now be programmed in WCC 60511 and 61511.

**C-2.15. Program Development.** The Corps Civil Works program will be developed in increments by Business Line from a zero base. The proposed work included in each increment will be evaluated against the performance criteria specified for each Business Line. The initial increment should provide the greatest benefit for the investment consistent with performance measures. Each subsequent increment should be ordered by the performance benefits to be gained versus the cost of the work contained in the increment.

**C-2.16. Business Line Increment Limits.** For consistency in the formulation of the Civil Works budget across Business Lines, across appropriations and across Districts, guidelines on the development of work increments are presented in the Definition/Glossary section of the main text and within the business line annexes. Remember that increments can facilitate ranking, but they are not used to rank or prioritize activities. Performance metrics will be used to set funding priorities.

**Table C-2-2 is the 5-year average of the O&M President's Budget amount by MSC. The philosophy is to use Increment 1 as the minimum level to account for critical routine activities (both operations and maintenance) and to use Increment 2 to account for critical non-routine activities on our high performing projects.**

Table C-2-2 Total for Increments 1 & 2 by MSC based on 75 percent of prior five fiscal year Budgets (Dollars in Thousands)			
MSC	Amounts		
LRD	274,649		
MVD	291,186		
NAD	148,508		
NWD	179,427		
POD	14,320		
SAD	240,237		
SPD	90,341		
SWD	227,578		
TOTAL	1,466,245		

**C-2.17. Recreation Service Level.** The Recreation Business Line initial increment has been defined by service level. Accordingly, the electronic tool developed to support Recreation performance measure calculation, Rec-BEST, is also based on service levels. Performance values are calculated for the initial service level, as well as for each budget activity created above initial. Recreation budget activities will be evaluated individually based upon their performance values. All the budget packages will be grouped into the corresponding increments in P2, but separated by "Budget Item" (BEST\_ID) in P2 to assure the proper performance measures can be linked to each budget item in P2. Please see Appendix VI, Recreation, for additional information about budget development for the Recreation Business Line.

**C-2.18. Environment-Stewardship Budget Evaluation System (E-S BEST).** This web-based tool has been developed for field use in calculating Environment-Stewardship performance measure outputs for O&M activities. E-S BEST must be used to support ranking PY Environment-Stewardship O&M and MR&T budget packages. Using E-S BEST, Environment-Stewardship budget activities (as defined by Work Category Codes) may be combined to create budget packages. A budget package is to contain all the budget activities that are necessary to produce a specified and quantified performance output. Performance outputs values will be calculated for all budget packages created in E-S BEST, using information provided by the Operations Manager or appropriate project budget developer. E-S BEST will support the ranking of all the Environment-Stewardship budget packages at the District, MSC, and HQ levels. Environment-Stewardship budget packages will be grouped into increments in accord with the definitions provided in the main portion of the EC. See Sub-Appendix II-3, Environment-Stewardship for additional information about budget development for the Environment-Stewardship Business Line.

**C-2.19. Projects Previously Funded in Construction.** The PY Civil Works budget will fund five types of previously funded Construction activities in the Operation and Maintenance account. These activities are appropriately funded in the Operation and Maintenance account, both because of the nature of the work they represent and because of their integral connection to operation and maintenance. This reassignment improves accountability and oversight, reflects the full cost of operation and maintenance, and supports an integrated funding strategy for existing projects.

a. **Biological Opinions:** Activities necessary to comply with Biological Opinions, pursuant to the Endangered Species Act, to avoid jeopardizing listed species at existing projects. Compliance costs will be allocated among the project purposes of the operating projects.

b. **Rehabilitations:** Work to restore or ensure continuation of project functions or outputs. Rehabilitation of existing projects will compete for funding on a level playing field with other operation and maintenance activities. Fifty percent of the costs of rehabilitations for inland waterway projects will be derived from the Inland Waterways Trust Fund. Section 205 of WRDA 92 defines "rehabilitation," with respect to inland waterway projects, as economically justified, structural restoration of major project features that extends project life more than 2 years, or structural modifications that enhance operational efficiency, and that exceed certain cost thresholds. Continued maintenance may be viewed as the alternative to rehabilitation, and so rehabilitations should compete against maintenance. Also, since rehabilitations are not as large as replacements they can be programmed more easily in the Operation and Maintenance account.

(1) New Rehabilitation projects will be funded with O&M funds. One-half of the funding for new Rehabilitations projects for inland and intracoastal waterways proposed for funding in the PY will be derived from the Inland Waterways Trust Fund (IWTF).

(2) The Rehabilitation program consists of work included in only one of two mutually exclusive categories: reliability improvements. The Reliability category encompasses major project feature restoration consisting of structural work on a Corps operated and maintained facility such as a lock, dam, etc., intended to improve the reliability of an existing structure, the result of which will be the deferral of capital expenditures to replace the structure. Rehabilitation will be considered when it can significantly extend the physical life of the feature and can be economically justified by benefit-cost ratio analysis. The work will extend over at least two full construction seasons and will require at least \$6.6 million in outlays. For inland waterways projects, the reliability threshold will be \$11 million.

(3) The proposed Rehabilitation project must have an evaluation report at HQUSACE for review by 15 March of the PY-2 in accordance with Chapter 3 of ER 1130-2-500 and Chapter 3 of EP 1130-2-500 with HQUSACE approval expected by 1 August of the PY-2.

(4) The proposed work must not require additional Congressional authorization.

(5) Dam Safety and Seepage/Stability Correction projects will be included in Construction program.

(6) Items within the efficiency improvement category are to be included in the Construction program as Replacements.

c. **Dredged Material Disposal Facilities (DMDFs).** DMDFs are included for material from maintenance dredging. Funding for the dredged material disposal facilities would be derived from the Harbor Maintenance Trust Fund.

d. **Beneficial Use of Dredged Material.** Beneficial use of Dredged material from maintenance dredging: Construction of facilities, projects or features that use maintenance dredging material. These include beneficial uses of dredged material for island and marsh creation, shore protection, and other environmental purposes pursuant to the Section 204 / 207 / 933 Continuing Authority Program and specific authorizations.

e. **Renourishment to Restore Sand Lost to Shorelines from Federal Navigation Operation and Maintenance:** Replacement of sand lost from shores due to the operation of Federal navigation projects (navigation mitigation). This activity would be carried out pursuant to specific authorizations for shore protection projects that involve navigation mitigation, and pursuant to the Section 111 Continuing Authority Program. Funding for navigation mitigation will be derived from the Harbor Maintenance Trust Fund.

Assume that proposed PY-1 appropriations bill language will enable funding of these activities from the Operation and Maintenance account. Proposed language includes a provision for activities to comply with the Endangered Species Act at existing projects as well as funding for “eligible operations and maintenance” to be derived from the Harbor Maintenance Trust Fund. According to Section 201 of the Water Resources Development Act of 1996, eligible operations and maintenance activities include not only harbor dredging but also the dredged material disposal facilities and navigation mitigation.

f. **CCS Codes (Projects Moved from C to O&M)**



Table C 2.19 CCS  
Codes.doc

C-2.20. **Deficiency Corrections.** All deficiencies at Corps of Engineers operated and maintained projects will be corrected using O&M funds. Deficiencies with an estimated total cost of greater than \$5 million were previously included in Construction.

C-2.21. **Additional Information**

a. **Database System.** P2 will be used to submit data for the O&M program. For guidance and instructions on use of P2 refer to paragraph 13 in the main EC, and the document named “CW Program Budget Submission (PBS) Functional Design” which can be obtained from a link on the P2 OFA-CW opening screen or directly from <https://p2ofa.usace.army.mil/oew-install/doc/PBS%20Functional%20Design.doc>.

b. **Correction of Program Submittals.** As in past years, districts and MSCs will be asked to make any necessary corrections through automated program systems after HQUSACE review. If a district or MSC is asked to make corrections, the database will be reopened to allow access for updating.

c. **Points of Contact.**

<b>Table C-2-3 Contact for General/Miscellaneous Items</b>		
<b>Question(s) Referring To</b>	<b>Office</b>	<b>Telephone</b>
Policies, procedures, or format of the Project O&M activity.	CECW-IP	202-761- 4130 fax 202-761-4370
Automated input for the same activity	CECW-IN	202-761 4215 fax 202-761- 5295
Programs Management staff coordination of Congressional submission of the O&M program.	CECW-IP	202-761- 4130 fax 202-761-4370 <b>(e-mail preferred)</b>
Curation\Native American Graves Protection Act (NAGPRA)	CECW-PC-NWD	202-761- 4618

C-2.22. **Submission Requirements.** Submission time schedules for automated data and hard copies are listed in Table 2 of the main text.

<b>TABLE C-2-4 Contacts for Performance Measures for O&amp;M Program Submittal</b>			
<b>ENTRY #</b>	<b>PROPONENT MANAGER</b>	<b>BUSINESS FUNCTION</b>	<b>PERFORMANCE MEASURE</b>
1	CECW-CO 202-761-8648	Navigation	Percent Time Achieve Purpose – Coastal
2	CECW-CO 202-761-8648	Navigation	Percent Time Achieve Purpose – Inland
3	CECW-CP 202-761-4127	Flood Damage Reduction	Availability
4	CECW-CO 202-761-4889	Hydropower	Forced Outage
5	CECW-CO 202-761-4889	Hydropower	Peak Season Availability
6	CECW-CO 202-761-0036	Recreation	Recreation Unit Day Availability
7	CECW-CO 202-761-0036	Recreation	Facility Condition Index

<b>TABLE C-2-4</b> <b>Contacts for Performance Measures</b> <b>for O&amp;M Program Submittal</b>			
<b>ENTRY #</b>	<b>PROPONENT MANAGER</b>	<b>BUSINESS FUNCTION</b>	<b>PERFORMANCE MEASURE</b>
8	CECW-CO 202-761-0036	Recreation	NED Benefit
9	CECW-CO 202-761-1228 202-761-4704	Environment – Stewardship	Percent of Minimum Level One Natural Resources Inventory Completed
10	CECW-CO 202-761-4704	Environment – Stewardship	Percent of Healthy and Sustainable Acres on Corps Property
11	CECW-CO 202-761-4704	Environment- Stewardship	Mitigation Land Meeting Requirements
12	CECW-CO 202-761-4704	Environment- Stewardship	Percent of Corps-Operated Projects with Master Plans in Compliance with ER 1130-2- 550
13	CECW-CO 202-761-4690	Environmental – Compliance	a. Significant Findings Corrected b. Major Findings Corrected

SUB-ANNEX C-3  
OPERATION AND MAINTENANCE  
NATIONAL EMERGENCY PREPAREDNESS PROGRAM (NEPP)

C-3.1. **General.** Through the use of the Evaluation and Corrective Action Program and other similar assessment tools, every effort should be made to ensure that your current state of organizational readiness is maintained in a manner which assures that your capability to support the nation in a national emergency is sustained. National Emergency Preparedness Program (NEPP) activities to be programmed are Local Preparedness (Continuity of Operations) 903-510, National Preparedness (primarily the development of Catastrophic Disaster Response Plans (CDRP)) 903-520, Facilities (903-530), the Emergency Water Program (903-540), Continuity of Government (903-550), and NEPP Training/Exercises (903-560). Overall program priorities are:

- Preparedness Plans and SOPs (including CDRP's, COOP, COG)
- Program Management
- Exercises and Training
- Emergency Facilities (EOC)

Field organizations should not anticipate any significant mid-year fiscal relief from HQUSACE (CECS-HS) for personnel or other program costs. MSC's should critically review subordinate district requirements to ensure consistency with overall priorities. If necessary, MSC's should propose reprogramming within the Division to accomplish highest priority efforts.

C-3.2. **General Program.**

a. **National Emergency Preparedness Program (Code 903-500).** This feature series includes those civil administrative, supervisory and procurement activities at each USACE activity that are concerned solely with developing and maintaining a high state of preparedness for national emergency operations of the Corps of Engineers Civil Works functions.

b. **Continuity of Operations (Code 903-510).** This feature series applies to USACE oriented Continuity of Operations (COOP) preparedness planning. Activities in this category include those associated with the identification of specific USACE reconstitution missions, the analysis of required resources, the establishment of organizational and operational procedures, the preparation and publication of contingency plans, and the participation in exercises related to USACE emergency relocation and reconstitution missions as a result of either a natural or manmade disaster. Planning items should include but are not limited to: command succession, identification of alternate relocation/alternate headquarters site(s) (NEPP does not support funding for the acquisition of space), development of appropriate crisis relocation team(s), identification and storage of duplicate emergency files, and other considerations necessary to ensure minimum downtime of the affected organization. This also includes, in conjunction with other appropriate offices, the development of a framework for the individual plans that address the continued operation of Corps civil works projects.

c. **National Preparedness Planning (Code 903-520).** This feature series consists of activities and services which provide the Corps with the capability to ensure that MSC's and districts can provide support for the nation during national emergency events other than reconstitution. Included are those activities associated with the identification of the USACE national emergency missions, the establishment of organizational and operational procedures, the preparation and publication of catastrophic disaster

response plans. Also included is the necessary planning coordination with related Federal, state, and local entities. Efforts include, but are not limited to, the following:

- (1) Technological and other manmade disasters.
- (2) Anti and Counter Terrorism.
- (3) Military Support to Civil Authorities, including the development of catastrophic disaster response plans.
- (4) Command, Control, Communications and Computers (C4).
- (5) Individual Mobilization Augmentee (IMA) Program Management. IMA management associated solely with disaster response and the development and maintenance of disaster related TDAs.
- (6) Port Readiness. Activities associated with maintenance of navigable waterways.
- (7) Resource Management and Administration. Requirements associated with programming, personnel management, and reports.

d. **Emergency Operations Center Support (Code 903-530).** This feature consists of the exclusive use of space which supports Emergency Operations Centers (EOCs). Included are those activities associated with the operation and maintenance in support of the facilities (rent, supplies, equipment, etc.). This class does not include any labor charges. The EOC will be funded on a joint basis between NEPP and other readiness programs.

e. **Emergency Water Program (Code 903-540).** This applies to requirements of Executive Order (E.O.) 12656 (For Headquarters, U.S. Army Corps of Engineers (HQUSACE only)).

f. **Continuity of Government (Code 903-550).** Defined as plans to support Federal Emergency Management Agency (FEMA) and other Federal, state and local agencies in their efforts to reestablish civil authority lost as a result of natural or manmade disaster or an attack on the United States (HQUSACE and only as directed).

g. **Catastrophic Disaster Training and Exercises (Code 903-560).** The development of and participation in catastrophic disaster exercises and training in the inter- and intra-agency arena. The development and participation in evaluation and corrective action programs related to catastrophic disasters will be funded under this class.

C-3.3. **Cost Estimates.** Estimates should include overhead costs for both PY-1, PY, and PY+n. PY-1 figures entered in Illustrations C-3.1 and C-3.2 should reflect any recommended increases from the PY-1 program request.

C-3.4. **Recommended Funding Level.** PY-1 and PY funding levels for all series other than Code 903-520 are expected to be no higher than PY-2 levels, (Code 903-520 funding will be based upon specific scenario based CDRP assignments). MSC's will establish priorities for each major level of effort and identify those areas which cause recommended division/district programs to exceed funding levels defined. Requirements above PY-2 allocations should be specifically addressed. Salary costs for MSC

Emergency Management Chiefs are to be funded under the Expenses appropriation, not Operation and Maintenance, or Flood Control and Coastal Emergencies appropriation accounts.

**C-3.5. Submission Requirements.** HQUSACE will provide electronic versions for Illustrations to MSC's. MSC's will consolidate district's submissions and forward hard copies to the Office of Homeland Security, CECS-HS, not later than 15 June. Although detailed breakdowns of MSC and district programs for PY + n years are not required, districts will provide estimates to division headquarters to justify total programs for PY + n. Questions regarding NEPP program management submissions can be addressed to Germaine Hofbauer, telephone: (202) 761-4970.

EC 11-2-187  
11 May 07

ILLUSTRATION C-3.1  
NATIONAL EMERGENCY PREPAREDNESS PROGRAM  
FOUR-YEAR PROGRAM  
(Dollars in thousands)

APPROPRIATION TITLE: Operation and Maintenance. FY  
(PY)  
DIVISION OFFICE OR DISTRICT: \_\_\_\_\_.  
(SYMBOL)

Date  
(Date Prepared)

Class	Title	PY-1	PY	PY+1	PY+2	PY+3	PY+4
510	Continuity of Operations						
520	National Preparedness Planning						
530	Emergency Operations Center Support						
560	Catastrophic Disaster Training/Exercises						
	Totals						

[FOR ILLUSTRATION PURPOSES ONLY -- TYPE AS REQUIRED]

ILLUSTRATION C-3.2  
\_\_\_\_\_  
DIVISION  
NATIONAL EMERGENCY PREPAREDNESS PROGRAM  
RECOMMENDED PROGRAM SUPPORTING DATA  
(Dollars in thousands)

APPROPRIATION TITLE: Operation and Maintenance. FY

(PY)

DIVISION OFFICE OR DISTRICT: \_\_\_\_\_.  
(Symbol)

Date \_\_\_\_\_  
(Date Prepared)

ACTIVITY	MAJOR AREA OF EFFORT	PRIORITY	PY-1	PY	PY+2
510	Continuity of Operations				
520	National Preparedness Planning				
530	Emergency Operations Center Support				
560	Catastrophic Disaster Training/Exercises				
	Totals				

**[FOR ILLUSTRATION PURPOSES ONLY -- TYPE AS REQUIRED]**

ALL PREVIOUSLY PUBLISHED ILLUSTRATIONS FOR THIS CHAPTER (c-3) HAVE BEEN DELETED

SUB-ANNEX C-4  
OPERATION AND MAINTENANCE

WORK CATEGORY CODES

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<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
601-- <sup>1/</sup>	Operation for Navigation Functions
60110 **	Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Navigation
60120 <sup>1/</sup>	Studies and Surveys for Navigation
60121*	Studies and Surveys
60122	Major Rehabilitation Evaluation Reports
60123	Environmental Studies and Monitoring for Dredging Purposes
60130 <sup>1/</sup>	Dam Safety for Navigation
60131**	Instrumentation, Data Collection and Analysis
60132*	Formal Periodic Inspections and Reports
60133	Dam Safety Assurance Studies
60140 <sup>1/</sup>	Water Management (Control and Quality) Activities for Navigation
60141	Water Management (Control and Quality) Activities - Analysis and Studies for Navigation
60142	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Navigation
60150*	Real Estate Management for Navigation
60160	Environmental Compliance Management for Navigation
60190 <sup>1/</sup>	Facility Security for Navigation
60191	Facility Security Assessments for Navigation
60192	Facility Security Guards, Monitoring Activities for Navigation
602-- <sup>1/</sup>	Operation for Flood Damage Reduction Functions
60210**	Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Flood Damage Reduction
60220 <sup>1/</sup>	Studies and Surveys for Flood Damage Reduction
60221	Studies and Surveys
60222	Major Rehabilitation Evaluation Reports
60223*	Inspections of Completed Works - Local Protection Projects
60230 <sup>1/</sup>	Dam Safety for Flood Damage Reduction
60231**	Instrumentation, Data Collection and Analysis
60232*	Formal Periodic Inspections and Reports
60233	Dam Safety Assurance Studies

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60240 <sup>1/</sup>	Water Management (Control and Quality) Activities for Flood Damage Reduction
60241	Water Management (Control and Quality) Activities - Analysis and Studies for Flood Damage Reduction
60242	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Flood Damage Reduction
60250*	Real Estate Management for Flood Damage Reduction
60260	Environmental Compliance Management for Flood Damage Reduction
60290 <sup>1/</sup>	Facility Security for Flood Damage Reduction
60291	Facility Security Assessments for Flood Damage Reduction
60292	Facility Security Guards, Monitoring Activities for Flood Damage Reduction
603-- <sup>1/</sup>	Operation for Hydropower Functions
60310 <sup>1/</sup>	Operation of Dams, Power Plants, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower
60311**	Operations - Supervision and Engineering
60312**	Hydraulic Expenses
60313**	Electric Expenses
60314**	Miscellaneous Hydraulic Power Generation Expenses
60320 <sup>1/</sup>	Studies and Surveys for Hydropower
60321	Studies and Surveys - Supervision and Engineering
60322	Studies and Surveys - Hydraulic Expenses
60323	Studies and Surveys - Electric Expenses
60324	Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses
60325	Major Rehabilitation Evaluation Reports
60330 <sup>1/</sup>	Dam Safety for Hydropower
60331**	Instrumentation, Data Collection and Analysis
60332*	Formal Periodic Inspections and Reports
60333	Dam Safety Assurance Studies
60340 <sup>1/</sup>	Water Management (Control and Quality) Activities for Hydropower
60341	Water Management (Control and Quality) Activities - Analysis and Studies for Hydropower
60342	Water Management (Control and Quality) Activities - Operation of

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
	Water Control Data Systems for Hydropower
60350*	Real Estate Management for Hydropower
60360	Environmental Compliance Management for Hydropower
60390 <sup>1/</sup>	Facility Security for Hydropower
60391	Facility Security Assessments for Hydropower
60392	Facility Security Guards, Monitoring Activities for Hydropower
604-- <sup>1/</sup>	Operation for Environmental Stewardship Functions
60410 <sup>1/</sup>	Operation for Environmental Stewardship
60411	Management of Natural Resources for Environmental Stewardship
60412	Management and Curation of Archeological and Cultural Resources
60413	Management of Natural Resources Mitigation Features
60414	Fisheries Management - Operation of Fish Hatcheries
60415	Fisheries Management – Fish Hauling Activities and Fish Passage Structures
60416	Comprehensive Master Plans
60417	Shoreline Management
60418	Management of Special Status Species for Environmental Stewardship
60419	Pest Management for Environmental Stewardship
60420 <sup>1/</sup>	Studies, Surveys and Inventories for Environmental Stewardship
60421	Studies, Surveys and Inventories for Environmental Stewardship
60422	Inspection of Ecosystem Restoration Projects
60430	Reserved
60440 <sup>1/</sup>	Water Management (Control and Quality) Activities for Environmental Stewardship
60441	Water Management (Control and Quality) Activities - Analysis and Studies for Environmental Stewardship
60442	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Environmental Stewardship
60450*	Real Estate Management for Environmental Stewardship
60460	Environmental Compliance Management for Environmental Stewardship
60490 <sup>1/</sup>	Facility Security for Environmental Stewardship
60491	Facility Security Assessments for Environmental Stewardship

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60492	Facility Security Guards, Monitoring Activities for Environmental Stewardship
605-- <sup>1/</sup>	Operation for Recreation Functions
60510 <sup>1/</sup>	Operation for Recreation
60511**	Operation/management of Recreation Areas/facilities, Reservoirs, Service Facilities and Equipment, Etc. for Recreation
60513	Law Enforcement - Costs and Supervision of Law Enforcement Agreements
60514	Operation/management of Visitor Centers
60520	Studies and Surveys for Recreation
60530	Reserved
60540 <sup>1/</sup>	Water Management (Control and Quality) Activities for Recreation
60541	Water Management (Control and Quality) Activities - Analysis and Studies for Recreation
60542	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Recreation
60550*	Real Estate Management for Recreation
60560	Environmental Compliance Management for Recreation
60590 <sup>1/</sup>	Facility Security for Recreation
60591	Facility Security Assessments for Recreation
60592	Facility Security Guards, Monitoring for Recreation
606-- <sup>1/</sup>	Joint Activities for Operations (Cat/Class 300 Multipurpose Hydropower Projects ONLY)
60610**	Joint Costs for Operations Activities
60620 <sup>1/</sup>	Joint Costs for Studies and Surveys
60621*	Joint Costs for Studies and Surveys
60622	Joint Costs for Major Rehabilitation Evaluation Reports
60630 <sup>1/</sup>	Joint Costs for Dam Safety Activities
60631**	Joint Costs for Instrumentation, Data Collection and Analysis
60632*	Joint Costs for Formal Periodic Inspections and Reports
60633	Joint Costs for Dam Safety Assurance Studies
60640 <sup>1/</sup>	Joint Costs for Water Management (Control and Quality) Activities
60641	Joint Costs for Water Management (Control and Quality) Activities – Analysis and Studies

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60642	Joint Costs for Water Management (Control and Quality) Activities – Operation of Water Control Data Systems
60650*	Joint Costs for Real Estate Management Activities
60660	Joint Costs for Environmental Compliance Management Activities
60690 <sup>1/</sup>	Joint Costs for Facility Security Activities
60691	Joint Costs for Facility Security Assessments
60692	Joint Costs for Facility Security Guards, Monitoring Activities
60710 <sup>1/</sup>	National Emergency Preparedness Program (NEPP)
60711	NEPP Continuity of Operations
60712	NEPP National Preparedness Planning
60713	NEPP Support of Emergency Ops Ctrs
60714	NEPP Emergency Water Program
60715	NEPP Continuity of Government
60716	NEPP Training and Exercises
608-- <sup>1/</sup>	Operation for Water Supply Functions
60810 <sup>1/</sup>	Operation for Water Supply
60811	Operation of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply
60812	Water Supply Agreements
60820	Studies and Surveys for Water Supply
611— <sup>1/</sup>	Maintenance for Navigation Functions
61110	Maintenance of Locks, Dams, Reservoirs, Levees, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Navigation
61120 <sup>1/</sup>	Dredging for Navigation
61121	Dredging Activities for Navigation
61122	Construction and Maintenance of Dredged Material Disposal Facilities for Navigation
61130	Dam Safety Remediation of Deficiencies for Navigation
61140	Purchase/maintenance of Water Management (Control and Quality) Equipment for Navigation
61150 <sup>1/</sup>	Real Estate for Navigation
61151	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Navigation

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
61152	Resolution of Real Estate Encroachments for Navigation
61153	Boundary Monumentation and Rectification for Navigation
61160	Environmental Compliance (Remedial Actions) for Navigation
61170	Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Navigation
61190 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Navigation
61191	Facility Security Maintenance and Replacement for Navigation
61192	Facility Security Physical Improvements and Modifications for Navigation
612— <sup>1/</sup>	Maintenance for Flood Damage Reduction Functions
61210 <sup>1/</sup>	Maintenance for Flood Damage Reduction
61211	Maintenance of Dams, Reservoirs, Other Structures, Service Facilities, permanent Operating Equipment, Etc. for Flood Damage Reduction
61212	Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for the Mississippi River and Tributaries (MR&T)
61220 <sup>1/</sup>	Dredging for Flood Damage Reduction
61221	Dredging Activities for Flood Damage Reduction
61222	Construction and Maintenance of Dredged Material Disposal Facilities for Flood Damage Reduction
61230	Dam Safety Remediation of Deficiencies for Flood Damage Reduction
61240	Purchase/maintenance of Water Management (Control and Quality) Equipment for Flood Damage Reduction
61250 <sup>1/</sup>	Real Estate for Flood Damage Reduction
61251	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Flood Damage Reduction
61252	Resolution of Real Estate Encroachments for Flood Damage Reduction
61253	Boundary Monumentation and Rectification for Flood Damage Reduction
61260	Environmental Compliance (Remedial Actions) for Flood Damage Reduction
61290 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
	and Replacement for Flood Damage Reduction
61291	Facility Security Maintenance and Replacement for Flood Damage Reduction
61292	Facility Security Physical Improvements and Modifications for Flood Damage Reduction
613— <sup>1/</sup>	Maintenance for Hydropower Functions
61310 <sup>1/</sup>	Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower
61311	Maintenance Supervision for Hydropower
61312	Maintenance of Hydraulic Structures for Hydropower
61313	Maintenance of Electric Plant for Hydropower
61314	Maintenance of Miscellaneous Hydraulic Plant for Hydropower
61320	Dredging Activities for Hydropower
61330	Dam Safety Remediation of Deficiencies for Hydropower
61340	Purchase/maintenance of Water Management (Control and Quality) Equipment for Hydropower
61350 <sup>1/</sup>	Real Estate for Hydropower
61351	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Hydropower
61352	Resolution of Real Estate Encroachments for Hydropower
61353	Boundary Monumentation and Rectification for Hydropower
61360	Environmental Compliance (Remedial Actions) for Hydropower
61370 <sup>1/</sup>	Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Hydropower
61371	Comprehensive Replacement Supervision
61372	Comprehensive Replacement of Structures
61373	Comprehensive Replacement of Electric Plant
61374	Comprehensive Replacement of Miscellaneous Hydraulic Plant
61390 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Hydropower
61391	Facility Security Maintenance and Replacement for Hydropower
61392	Facility Security Physical Improvements and Modifications for Hydropower
614— <sup>1/</sup>	Maintenance for Environmental Stewardship Functions

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
61410 <sup>1/</sup>	Maintenance for Environmental Stewardship
61411	Maintenance of Natural Resources Facilities for Environmental Stewardship
61412	Mitigation of Archeological and Cultural Resources
61413	Maintenance of Natural Resources Mitigation Features
61414	Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures
61418	Maintenance for Special Status Species for Environmental Stewardship
61420 <sup>1/</sup>	Dredging for Environmental Stewardship
61421	Dredging Activities for Environmental Stewardship
61422	Construction and Maintenance of Dredged Material Disposal Facilities for Environmental Stewardship
61430	Reserved
61440	Purchase/maintenance of Water Management Equipment (Control and Quality) for Environmental Stewardship
61450 <sup>1/</sup>	Real Estate for Environmental Stewardship
61451	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Environmental Stewardship
61452	Resolution of Real Estate Encroachments for Environmental Stewardship
61453	Boundary Monumentation and Rectification for Environmental Stewardship
61460	Environmental Compliance (Remedial Actions) for Environmental Stewardship Features
61490 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Environmental Stewardship
61491	Facility Security Maintenance and Replacement for Environmental Stewardship
61492	Facility Security Physical Improvements and Modifications for Environmental Stewardship
615— <sup>1/</sup>	Maintenance for Recreation Functions
61510 <sup>1/</sup>	Maintenance for Recreation
61511	Maintenance of Recreation Facilities, Other Operating Equipment, Etc.
61513	Cost Shared Recreation Developments

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
61514	Maintenance of Visitor Centers
61515	Modernization of Recreation Features
61520	Dredging Activities for Recreation
61530	Reserved
61540	Purchase/maintenance of Water Management Equipment (Control and Quality) for Recreation
61550 <sup>1/</sup>	Real Estate for Recreation
61551	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Recreation
61552	Resolution of Real Estate Encroachments for Recreation
61553	Boundary Monumentation and Rectification for Recreation
61560	Environmental Compliance (Remedial Actions) for Recreation
61590 <sup>1/</sup>	Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Recreation
61591	Facility Security Maintenance and Replacement for Recreation
61592	Facility Security Physical Improvements and Modifications for Recreation
616— <sup>1/</sup>	Joint Activities for Maintenance (Cat/Class 300 Multipurpose Hydropower Projects ONLY)
61610	Joint Costs for Maintenance Activities Excluding Dredging
61620 <sup>1/</sup>	Joint Costs for Dredging
61621	Joint Costs for Dredging Activities
61622	Joint Costs for Construction and Maintenance of Dredged Material Disposal Facilities
61630	Joint Costs for Dam Safety Remediation of Deficiencies
61640	Joint Costs for Water Management Equipment Activities
61650 <sup>1/</sup>	Joint Costs for Real Estate Activities
61651	Joint Costs for Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits
61652	Joint Costs for Resolution of Real Estate Encroachments
61653	Joint Costs for Boundary Monumentation and Rectification
61660	Joint Costs for Environmental Compliance (Remedial Actions) Activities
61690 <sup>1/</sup>	Joint Costs for Facility Security Physical Improvements, Modifications, Maintenance and Replacement

<b>TABLE C-4.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
<b>WORK CATEGORY CODE</b>	<b>DESCRIPTION</b>
61691	Joint Costs for Facility Security Maintenance and Replacement
61692	Joint Costs for Facility Security Physical Improvements and Modifications
618-- <sup>1/</sup>	Maintenance for Water Supply Functions
61810	Maintenance of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply

1/ SUMMARY COST ACCOUNT/WORK CATEGORY CODE - COSTS MAY NOT BE CHARGED DIRECTLY TO THESE ACCOUNTS.

NOTE: PERIODIC INSPECTIONS AND REPORTS, AND INSTRUMENTATION, DATA COLLECTION AND ANALYSIS ARE TO BE INCLUDED IN THE MINIMUM PROGRAM FOR THE PROJECT TO MEET MINIMUM LEGAL RESPONSIBILITIES FOR OPERATIONS AND SAFETY. THIS FOOTNOTE APPLIES TO THE WORK CATEGORY CODES 60131, 60132, 60231, 60232, AND 60331, 60332, 60631 AND 60632.

\*Work Category Codes marked with an asterisk require added data in project work description, justification statement, or output measures.

\*\*Although Work Category Codes marked with double asterisk require no description or funding argument, requested resources will be in consonance with the funding increment and prior year experience.

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Boundary Monumentation and Rectification for Environmental Stewardship	61453
Boundary Monumentation and Rectification for Flood Damage Reduction	61253
Boundary Monumentation and Rectification for Hydropower	61353
Boundary Monumentation and Rectification for Navigation	61153
Boundary Monumentation and Rectification for Recreation	61553
Comprehensive Master Plans	60416
Comprehensive Replacement of Electric Plant	61373
Comprehensive Replacement of Miscellaneous Hydraulic Plant	61374
Comprehensive Replacement of Structures	61372
Comprehensive Replacement Supervision	61371
Construction and Maintenance of Dredged Material Disposal Facilities for Flood Damage Reduction	61222
Construction and Maintenance of Dredged Material Disposal Facilities for Environmental Stewardship	61422
Construction and Maintenance of Dredged Material Disposal Facilities for Navigation	61122
Cost Shared Recreation Developments	61513
Dam Safety Assurance Studies	60333
Dam Safety Assurance Studies	60133
Dam Safety Assurance Studies	60233
Dam Safety for Flood Damage Reduction	60230 <sup>1/</sup>
Dam Safety for Hydropower	60330 <sup>1/</sup>
Dam Safety for Navigation	60130 <sup>1/</sup>
Dam Safety Remediation of Deficiencies for Flood Damage Reduction	61230
Dam Safety Remediation of Deficiencies for Hydropower	61330
Dam Safety Remediation of Deficiencies for Navigation	61130
Dredging Activities for Environmental Stewardship	61421
Dredging Activities for Flood Damage Reduction	61221
Dredging Activities for Hydropower	61320
Dredging Activities for Navigation	61121
Dredging Activities for Recreation	61520
Dredging for Environmental Stewardship	61420 <sup>1/</sup>

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Dredging for Flood Damage Reduction	61220 <sup>1/</sup>
Dredging for Navigation	61120 <sup>1/</sup>
Electric Expenses	60313**
Environmental Compliance (Remedial Actions) for Environmental Stewardship Features	61460
Environmental Compliance (Remedial Actions) for Flood Damage Reduction	61260
Environmental Compliance (Remedial Actions) for Hydropower	61360
Environmental Compliance (Remedial Actions) for Navigation	61160
Environmental Compliance (Remedial Actions) for Recreation	61560
Environmental Compliance Management for Environmental Stewardship	60460
Environmental Compliance Management for Flood Damage Reduction	60260
Environmental Compliance Management for Hydropower	60360
Environmental Compliance Management for Navigation	60160
Environmental Compliance Management for Recreation	60560
Environmental Studies and Monitoring for Dredging Purposes	60123
Facility Security Assessments for Environmental Stewardship	60491
Facility Security Assessments for Flood Damage Reduction	60291
Facility Security Assessments for Hydropower	60391
Facility Security Assessments for Navigation	60191
Facility Security Assessments for Recreation	60591
Facility Security for Environmental Stewardship	60490 <sup>1/</sup>
Facility Security for Flood Damage Reduction	60290 <sup>1/</sup>
Facility Security for Hydropower	60390 <sup>1/</sup>
Facility Security for Navigation	60190 <sup>1/</sup>
Facility Security for Recreation	60590 <sup>1/</sup>
Facility Security Guards, Monitoring Activities for Environmental Stewardship	60492
Facility Security Guards, Monitoring Activities for Flood Damage Reduction	60292
Facility Security Guards, Monitoring Activities for Hydropower	60392
Facility Security Guards, Monitoring Activities for Navigation	60192
Facility Security Guards, Monitoring Activities for Recreation	60592
Facility Security Maintenance and Replacement for Navigation	61191
Facility Security Physical Improvements and Modifications for Navigation	61192
Facility Security Physical Improvements, Modifications, Maintenance and	61190 <sup>1/</sup>

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Replacement for Navigation	
Facility Security Maintenance and Replacement for Flood Damage Reduction	61291
Facility Security Physical Improvements and Modifications for Flood Damage Reduction	61292
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Flood Damage Reduction	61290 <sup>1/</sup>
Facility Security Maintenance and Replacement for Hydropower	61391
Facility Security Physical Improvements and Modifications for Hydropower	61392
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Hydropower	61390 <sup>1/</sup>
Facility Security Maintenance and Replacement for Environmental Stewardship	61491
Facility Security Physical Improvements and Modifications for Environmental Stewardship	61492
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Environmental Stewardship	61490 <sup>1/</sup>
Facility Security Maintenance and Replacement for Recreation	61591
Facility Security Physical Improvements and Modifications for Recreation	61592
Facility Security Physical Improvements, Modifications, Maintenance and Replacement for Recreation	61590 <sup>1/</sup>
Fisheries Management – Fish Hauling Activities and Fish Passage Structures	60415
Fisheries Management - Operation of Fish Hatcheries	60414
Formal Periodic Inspections and Reports	60232*
Formal Periodic Inspections and Reports	60332*
Formal Periodic Inspections and Reports	60132*
Hydraulic Expenses	60312**
Inspection of Ecosystem Restoration Projects	60422
Inspections of Completed Works - Local Protection Projects	60223*
Instrumentation, Data Collection and Analysis	60131**
Instrumentation, Data Collection and Analysis	60231**
Instrumentation, Data Collection and Analysis	60331**
Joint Activities for Maintenance	616— <sup>1/</sup>
Joint Activities for Operations (Cat/Class 300 Multipurpose Hydropower	606— <sup>1/</sup>

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Projects ONLY)	
Joint Costs for Boundary Monumentation and Rectification	61653
Joint Costs for Construction and Maintenance of Dredged Material Disposal Facilities	61622
Joint Costs for Dam Safety Activities	60630 <sup>1/</sup>
Joint Costs for Dam Safety Assurance Studies	60633
Joint Costs for Dam Safety Remediation of Deficiencies	61630
Joint Costs for Dredging	61620 <sup>1/</sup>
Joint Costs for Dredging Activities	61621
Joint Costs for Environmental Compliance (Remedial Actions) Activities	61660
Joint Costs for Environmental Compliance Management Activities	60660
Joint Costs for Facility Security	60690 <sup>1/</sup>
Joint Costs for Facility Security Assessments	60691
Joint Costs for Facility Security Guards, Monitoring Activities	60692
Joint Costs for Facility Security Physical Improvements, Modifications, Maintenance and Replacement	61690 <sup>1/</sup>
Joint Costs for Facility Security Maintenance and Replacement	61691
Joint Costs for Facility Security Physical Improvements and Modifications	61692
Joint Costs for Formal Periodic Inspections and Reports	60632*
Joint Costs for Instrumentation, Data Collection and Analysis	60631**
Joint Costs for Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits	61651
Joint Costs for Maintenance Activities Excluding Dredging	61610
Joint Costs for Major Rehabilitation Evaluation Reports	60622
Joint Costs for Operations Activities	60610**
Joint Costs for Real Estate Activities	61650 <sup>1/</sup>
Joint Costs for Real Estate Management Activities	60650*
Joint Costs for Resolution of Real Estate Encroachments	61652
Joint Costs for Studies and Surveys	60621*
Joint Costs for Studies and Surveys	60620 <sup>1/</sup>
Joint Costs for Water Management (Control and Quality) Activities - Operation of Water Control Data Systems	60642
Joint Costs for Water Management (Control and Quality) Activities - Analysis and Studies	60641

**TABLE C-4.2**  
**WORK CATEGORY CODES - ALPHABETICALLY ORDERED**

DESCRIPTION	WORK CATEGORY CODE
Joint Costs for Water Management (Control and Quality) Activities	60640 <sup>1/</sup>
Joint Costs for Water Management Equipment Activities	61640
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Flood Damage Reduction	61251
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Environmental Stewardship	61451
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Navigation	61151
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Recreation	61551
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Hydropower	61351
Law Enforcement – Costs and Supervision of Law Enforcement Agreements	60513
Maintenance for Environmental Stewardship	61410 <sup>1/</sup>
Maintenance for Environmental Stewardship Functions	614— <sup>1/</sup>
Maintenance for Flood Damage Reduction	61210 <sup>1/</sup>
Maintenance for Flood Damage Reduction Functions	612— <sup>1/</sup>
Maintenance for Hydropower Functions	613— <sup>1/</sup>
Maintenance for Navigation Functions	611— <sup>1/</sup>
Maintenance for Recreation	61510 <sup>1/</sup>
Maintenance for Recreation Functions	615— <sup>1/</sup>
Maintenance for Water Supply Functions	608— <sup>1/</sup>
Maintenance of Dams, Reservoirs, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Flood Damage Reduction	61211
Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for the Mississippi River and Tributaries (MR&T)	61212
Maintenance of Electric Plant for Hydropower	61313
Maintenance of Electric Plant for Hydropower	6131_
Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures	61414
Maintenance of Hydraulic Structures for Hydropower	61312
Maintenance of Locks, Dams, Reservoirs, Levees, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Navigation	61110
Maintenance of Miscellaneous Hydraulic Plant for Hydropower	61314
Maintenance of Miscellaneous Hydraulic Plant for Hydropower	61314

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Maintenance of Natural Resources Facilities for Environmental Stewardship	61411
Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	61310 <sup>1/</sup>
Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	61310 <sup>1/</sup>
Maintenance of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply	61810
Maintenance of Recreation Facilities, Other Operating Equipment, Etc.	61511
Maintenance of Special Status Species for Environmental Stewardship	61418
Maintenance of Visitor Centers	61514
Maintenance of Natural Resources Mitigation Features for Environmental Stewardship	61413
Maintenance Supervision for Hydropower	61311
Major Rehabilitation Evaluation Reports	60122
Major Rehabilitation Evaluation Reports	60325
Major Rehabilitation Evaluation Reports	60222
Management and Curation of Archeological and Cultural Resources	60412
Management of Natural Resources for Environmental Stewardship	60411
Management of Special Status Species for Environmental Stewardship	60418
Management of Natural Resources Mitigation Features	60413
Miscellaneous Hydraulic Power Generation Expenses	60314**
Mitigation of Archeological and Cultural Resources	61412
Modernization of recreation Features	61515
National Emergency Preparedness Program (NEPP)	60710 <sup>1/</sup>
NEPP Management and Operations	60711
NEPP Requirements Analysis and Studies	60712
NEPP Support of Emergency Ops Ctr	60713
NEPP Training and Exercises	60716
Operation for Environmental Stewardship	60410 <sup>1/</sup>
Operation for Environmental Stewardship Functions	604— <sup>1/</sup>
Operation for Flood Damage Reduction Functions	602— <sup>1/</sup>
Operation for Hydropower Functions	603— <sup>1/</sup>
Operation for Navigation Functions	601— <sup>1/</sup>
Operation for Recreation	60510 <sup>1/</sup>

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Operation for Recreation Functions	605— <sup>1/</sup>
Operation for Water Supply	60810 <sup>1/</sup>
Operation for Water Supply Functions	608— <sup>1/</sup>
Operation of Dams, Power Plants, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	60310 <sup>1/</sup>
Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Flood Damage Reduction	60210**
Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Navigation	60110 **
Operation of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, Etc. for Water Supply	60811
Operation/management of Recreation Areas/facilities, Reservoirs, Service Facilities and Equipment, Etc. for Recreation	60511**
Operation/management of Visitor Centers	60514
Operations - Supervision and Engineering	60311**
Pest Management for Environmental Stewardship	60419
Purchase/maintenance of Water Management (Control and Quality) Equipment for Navigation	61140
Purchase/maintenance of Water Management (Control and Quality) Equipment for Flood Damage Reduction	61240
Purchase/maintenance of Water Management (Control and Quality) Equipment for Hydropower	61340
Purchase/maintenance of Water Management Equipment (Control and Quality) for Environmental Stewardship	61440
Purchase/maintenance of Water Management Equipment (Control and Quality) for Recreation	61540
Real Estate for Environmental Stewardship	61450 <sup>1/</sup>
Real Estate for Flood Damage Reduction	61250 <sup>1/</sup>
Real Estate for Hydropower	61350 <sup>1/</sup>
Real Estate for Navigation	61150 <sup>1/</sup>
Real Estate for Recreation	61550 <sup>1/</sup>
Real Estate Management for Environmental Stewardship	60450*
Real Estate Management for Flood Damage Reduction	60250*
Real Estate Management for Hydropower	60350*
Real Estate Management for Navigation	60150*

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Real Estate Management for Recreation	60550*
Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Hydropower	61370 <sup>1/</sup>
Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Navigation	61170
Reserved	60530
Reserved	61530
Reserved	60430
Reserved	61430
Resolution of Real Estate Encroachments for Environmental Stewardship	61452
Resolution of Real Estate Encroachments for Flood Damage Reduction	61252
Resolution of Real Estate Encroachments for Hydropower	61352
Resolution of Real Estate Encroachments for Navigation	61152
Resolution of Real Estate Encroachments for Recreation	61552
Shoreline Management	60417
Studies and Surveys	60121*
Studies and Surveys	60221
Studies and Surveys - Electric Expenses	60323
Studies and Surveys - Hydraulic Expenses	60322
Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses	60324
Studies and Surveys - Supervision and Engineering	60321
Studies and Surveys for Flood Damage Reduction	60220 <sup>1/</sup>
Studies and Surveys for Hydropower	60320 <sup>1/</sup>
Studies and Surveys for Navigation	60120 <sup>1/</sup>
Studies and Surveys for Recreation	60520
Studies and Surveys for Water Supply	60820
Studies, Surveys and Inventories for Environmental Stewardship	60421
Studies, Surveys and Inventories for Environmental Stewardship	60420 <sup>1/</sup>
Water Management (Control and Quality) Activities - Analysis and Studies for Flood Damage Reduction	60241
Water Management (Control and Quality) Activities - Analysis and Studies for Environmental Stewardship	60441
Water Management (Control and Quality) Activities - Analysis and Studies for Recreation	60541

<b>TABLE C-4.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Water Management (Control and Quality) Activities - Analysis and Studies for Navigation	60141
Water Management (Control and Quality) Activities - Analysis and Studies for Hydropower	60341
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Environmental Stewardship	60442
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Flood Damage Reduction	60242
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Recreation	60542
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Navigation	60142
Water Management (Control and Quality) Activities – Operation of Water Control Data Systems for Hydropower	60342
Water Management (Control and Quality) Activities for Environmental Stewardship	60440 <sup>1/</sup>
Water Management (Control and Quality) Activities for Flood Damage Reduction	60240 <sup>1/</sup>
Water Management (Control and Quality) Activities for Hydropower	60340 <sup>1/</sup>
Water Management (Control and Quality) Activities for Navigation	60140 <sup>1/</sup>
Water Management (Control and Quality) Activities for Recreation	60540 <sup>1/</sup>
Water Supply Agreements	60812

1/ SUMMARY COST ACCOUNT/WORK CATEGORY CODE - COSTS MAY NOT BE CHARGED DIRECTLY TO THESE ACCOUNTS.

2/ PERIODIC INSPECTIONS AND REPORTS, AND INSTRUMENTATION, DATA COLLECTION, AND ANALYSIS ARE TO BE INCLUDED IN THE MINIMUM PROGRAM FOR THE PROJECT TO MEET MINIMUM LEGAL RESPONSIBILITIES FOR OPERATIONS AND SAFETY. THIS FOOTNOTE APPLIES TO THE WORK CATEGORY CODES 60131, 60132, 60231, 60232, AND 60331, 60332, 60631 AND 60632.

\*Work Category Codes marked with an asterisk require added data in project work description, justification statement, or output measures.

\*\*Although Work Category Codes marked with double asterisk require no description or funding argument, requested resources will be in consonance with the funding increment and prior year experience.

**O&M WORK CATEGORY CODE  
MATRIXES AND DEFINITIONS**

C-4.3. O&M Work Category Code Matrixes and Definitions.

C-4.3.a. Operation Work Category Code Matrix by Business Line. See Table 4-3.a.

C-4.3.b. Maintenance Work Category Code Matrix by Business Line. See Table 4-3.b.

Table 4.3a and Table 4-3.b. Maintenance Work Category Code Matrix (by Business Line). See embedded excel file on pages C-2-8

C-4.3.c. Work Category Codes and Definitions for Operation Accounts. The Operation functions are broken down into Work Category Codes, together with a description of work to be performed in Table 4-3.c.

C-4.3.d. Work Category Codes and Definitions for Maintenance Accounts. The Maintenance functions are broken down into Work Category Codes, together with a description of work to be performed in Table 4-3.d.

**Section C-4.3c**  
**Work Category Codes and Definitions**  
**O&M Operations Accounts By Business Program:**

Navigation (601--)  
 Flood Damage Reduction (602--)  
 Hydropower (603--)  
 Environmental Stewardship (604--)  
 Recreation (605--)  
 Joint Activities (606--)  
 NEPP (607--)  
 Water Supply (608--)

A Breakdown of Work Category Codes (WCCs) and descriptions under these functions is on the following pages:

**WORK CATEGORY CODE: 60110 – Operations for Navigation**

**WORK CATEGORY DESCRIPTION:** Operations of Locks, Dams, Reservoirs, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for navigation features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of lock gates and/or associated equipment; maintaining lock records; removing debris, ice and snow, cleanup of lock facilities; routine adjusting of meters, relays, instruments, radios and regular equipment; lubrication of equipment;

of dam structures and appurtenant equipment such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes all costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to perform reservoir inspections and patrols, removal and control of trash and debris (major periodic or one-time removal of growth and debris from the reservoir should be recorded in Work Category Code 61110); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities; insect control and elimination of health and safety hazards; of project-owned permanent facilities such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided

as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery are charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories. This activity includes costs of buildings, grounds and utilities related to the operation of the Los Angeles-Long Beach and San Francisco Bay hydraulic models located in South Pacific Division and it does not include costs associated with recreation facilities and areas which will be included in Work Category Code 60511; of all tools and equipment, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project-owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles; for prevention of obstructive and injurious deposits at NAD projects as authorized by the Act approved 29 June 1888, as amended, including all costs for surveillance at harbors, channels, waterfront construction sites, and at overboard ocean dumping sites, costs to administer outstanding enforcement actions on prior noted violations of Federal statutes, and any costs required for ground or aerial surveillance.

WORK CATEGORY CODE: **60121** – Studies and Surveys for the Navigation Function

WORK CATEGORY DESCRIPTION: Studies and Surveys including project condition surveys, dredging studies, etc. for navigation features.

Includes all costs to perform surveys for the purpose of determining elevation, grade and sedimentation conditions in navigation projects, investigation of sunken vessels, and to prepare dredging studies. For program management purposes, all projects with funding requirements (dredging or otherwise) under the Non-deferrable levels should have any needed surveys programmed under the project name. All other surveys should be programmed in aggregation under PWID 14600: Project Condition Surveys. Funding for PWID 14600: Project Condition Surveys, will be adjusted after overall dredging program levels are determined.

WORK CATEGORY CODE: **60122** - Studies and Surveys for Navigation - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for navigation features.

Includes all costs to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60123** - Studies and Surveys for Navigation - Environmental Studies and Monitoring for Dredging Purposes

WORK CATEGORY DESCRIPTION: Environmental Studies and Monitoring for Dredging Purposes.

Includes all costs for environmental studies and monitoring for dredging purposes including all costs of study and analysis activities associated with long range environmental activities related to waterways. These activities are needed to ensure that appropriate information and requirements are fulfilled so that

E&D for dredging can be completed on a timely basis. Dredged Material Management Plans (DMMPs) are included in this Work Category. Environmental requirements to perform maintenance dredging of Federal channels (e.g. water quality certification, bio-assays, water quality testing, Environmental Impact Statements, and environmental assessments) should also be included in this Work Category.

**WORK CATEGORY CODE:**     **60131** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Navigation Function

**WORK CATEGORY DESCRIPTION:** Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to navigation features.

Includes all costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

**WORK CATEGORY CODE:**     **60132** - Formal Periodic Inspections and Reports for Dam Safety related to the Navigation Function

**WORK CATEGORY DESCRIPTION:** Formal Periodic Inspections and Reports for Dam Safety related to navigation features.

Includes all costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

- (a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.
- (b) Public Bridges.
- (c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.
- (d) Other projects where known conditions warrant inspections at a frequency more often than normal including revetments, dikes, groins, breakwaters, jetties, seawalls, piers and other similar structures provided in seas, lakes, rivers, canals, exposed tidal waters and harbors.

**WORK CATEGORY CODE:**     **60133** - Dam Safety Assurance Studies related to the Navigation Function

**WORK CATEGORY DESCRIPTION:** Dam Safety Assurance Studies for Dam Safety related to navigation features.

Includes all costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

**WORK CATEGORY CODE:**     **60141** - Water Management (Control and Quality) Activities for Navigation - Analysis and Studies

**WORK CATEGORY DESCRIPTION:** Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for navigation features.

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Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60142.

WORK CATEGORY CODE: **60142** - Water Management (Control and Quality) Activities for Navigation - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for navigation features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies, and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61140.

WORK CATEGORY CODE: **60150** - Real Estate Management for the Navigation Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for navigation features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60160** - Environmental Compliance Management for the Navigation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for navigation features.

Includes all Navigation operational costs to comply with applicable Federal environmental laws and regulations, including the National Environmental Policy Act (NEPA), Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance assessment (external or internal). Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance operational activities related to the Navigation function. Includes costs associated with the following activities: environmental compliance activities for maintenance shops supporting Navigation; environmental baseline inspection of outgrants and right-of-ways on lands allocated for operations; required personnel environmental training; development and update of required environmental plans for spill prevention, hazard communication, pollution prevention, hazardous material management; storage and handling of petroleum-oil & lubricants and preparation of pesticide reports and corresponding documentation. Includes costs associated with implementation and maintaining an Environmental Management System (EMS) which may be cost shared with other functions. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60170**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60180**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60191** – Facility Security Assessments for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for navigation features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for navigation features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60192, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61190.

WORK CATEGORY CODE: **60192** – Facility Security Guards, Monitoring Activities for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for navigation

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features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60191, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61190.

WORK CATEGORY CODE: **60210** - Operations for Flood Damage Reduction

WORK CATEGORY DESCRIPTION: Operations of Dams, Reservoirs, Levees, Hurricane Barrier Gates, and Other Flood Damage Reduction Non-Dam Structures, Pumping Plants, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for flood damage reduction features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of dam structures and appurtenant equipment such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes all costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to perform reservoir inspections and patrols, removal and control of trash and debris (major periodic or one-time removal of growth and debris from the reservoir should be recorded under Work Category Code 61210); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities, insect control and elimination of health and safety hazards;

of levees, hurricane barrier gates, and other gated non-dam flood damage reduction structures; vegetation control on flood damage reduction structures; removal of snow and ice from structures;

of pumping plants, pumps and associated equipment; collecting and maintaining operational records; routine replacement, purification and testing of insulating, lubricating and hydraulic oils; lubricants and lubricating equipment; minor maintenance of electrical equipment, cleaning, testing, and adjustment of motor starters, relays, meters, and similar equipment; minor maintenance and repair of pumps, motors, engines, trash raking equipment, gate hoists, gates, fire fighting, and other equipment required for operation; minor maintenance of buildings, roads, and grounds; removal of debris, ice, and snow;

of project-owned permanent facilities such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility

facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery are charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories. This activity does not include costs associated with recreation facilities and areas which will be included in Work Category Code 60511;

of all tools and equipment, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project-owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles.

Does not include specific Water Supply activities as in the past. Water Supply activities including that required by water supply contracts, collections including delinquencies and the renegotiation of existing water supply contracts are now included in WCCs 60811 and 60812.

WORK CATEGORY CODE: **60221** - Studies and Surveys for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Non-Navigation Project Condition Studies, including Dredging Studies, for flood damage reduction features.

Includes all costs to prepare reconnaissance reports or studies related to the maintenance and rehabilitation of Civil Works projects such as foundation reports, embankment criteria, O&M manuals, sediment surveys at flood damage reduction projects, surveillance of northern boundary waters, and hydraulic model analyses prior to the engineering and design phase. Does not include Water Supply reallocation study costs as in the past. Water Supply reallocation study costs are now included in WCC 60820.

WORK CATEGORY CODE: **60222** - Studies and Surveys for Flood Damage Reduction - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for flood damage reduction features.

Includes all costs to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60223** – Studies, Surveys and Inspections of Completed Works - Local Protection Projects

WORK CATEGORY DESCRIPTION: Studies, Surveys and Inspections of Local Protection Projects for flood damage reduction features.

Includes all costs related to the inspection of Federally constructed, locally operated and maintained projects to ensure compliance with local cooperative agreements. This Work Category does not include costs for projects covered by PL 84-99. Includes all costs for technical review and approval of sponsor-proposed alterations, improvements, excavation or construction within the limits of the project right-of-way; advice given to sponsors related to the effects of such activities on the function/operation of the project and information on acceptable construction methods; all costs to update O&M Manuals; initial funding of reconnaissance or evaluation reports; and PED for major rehabilitation, dam safety assurance, deficiency correction and reconstruction as applicable until Construction (C) funds are allocated.

WORK CATEGORY CODE: **60231** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to flood damage reduction features.

Includes all costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60232** - Formal Periodic Inspections and Reports for Dam Safety related to the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Formal Periodic Inspections and Reports for Dam Safety related to flood damage reduction features.

Includes all costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60233** - Dam Safety Assurance Studies related to the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Dam Safety Assurance Studies for Dam Safety related to flood damage reduction features.

Includes all costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60241** - Water Management (Control and Quality) Activities for Flood Damage Reduction - Analysis and Studies

**60241** - Water Management (Control and Quality) Activities for Flood Damage Reduction - Analysis and Studies

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60242.

WORK CATEGORY CODE: **60242** - Water Management (Control and Quality) Activities for Flood Damage Reduction - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for flood damage reduction features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies, and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61240.

WORK CATEGORY CODE: **60250** - Real Estate Management for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for flood damage reduction features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of, and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after

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vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government. Includes reconciliation of financial records with flood damage reduction land and mineral lease receipts, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60260** - Environmental Compliance Management for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for flood damage reduction features.

Includes all Flood Damage Reduction operational costs to comply with applicable Federal environmental laws and regulations, including the National Environmental Policy Act (NEPA), Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance assessment, external and internal. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance operational activities related to the Flood Damage Reduction Function. Includes costs associated with the following activities: environmental compliance activities for maintenance shops supporting Flood Damage Reduction; environmental baseline inspection of outgrants and right-of-ways on lands allocated for operations; required personnel environmental training; development and update of required environmental plans for spill prevention, hazard communication, pollution prevention, hazardous material management; underground storage tanks, storage and handling of pesticides and petroleum-oil & lubricants. Includes costs associated with implementation and maintaining an Environmental Management System (EMS) which may be cost shared with other business lines. Includes costs associated with implementation and maintaining an Environmental Management System (EMS) which may be cost shared with other functions. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. This Work Category also includes all costs for the management and curation of Orphan Collections and archeological materials collected from early local protection projects and subsequently turned over to local sponsors for operation and maintenance. All other costs for management and curation of archeological resources are included in Work Category Code 60412.

WORK CATEGORY CODE: **60270**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60280**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60291** – Facility Security Assessments for Flood Damage Reduction

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for flood damage reduction features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for flood damage reduction features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60292, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61290.

WORK CATEGORY CODE: **60292** – Facility Security Guards, Monitoring Activities for Flood Damage Reduction

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for flood damage reduction features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60291, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61290.

WORK CATEGORY CODE: **60310 (60311-60314)** - Hydropower Operations. Costs for this function will be sub-divided as follows:

**60311** - Hydropower Operations - Supervision and Engineering, FERC #535. Costs for labor, materials and other expenses incurred in the general supervision of the operation of hydraulic generating stations. Direct supervision of specific activities will be charged to the appropriate accounts;

**60312** - Hydropower Operations - Hydraulic Expenses, FERC #537. Costs for labor, materials and other expenses incurred in operating power intake works whether or not the powerhouse is an integral part of the intake dam;

**60313** - Hydropower Operations - Electric Expenses, FERC #538. Costs for labor, materials and other expenses incurred in operating turbines, generators, auxiliary apparatus, switchgear and other electric equipment to the point where electricity leaves for transmission by the marketing agency or other project. Keeping plant logs and records, and preparing reports of operation are included herein;

**60314** - Hydropower Operations - Miscellaneous Hydraulic Power Generation Expenses, FERC #539. Costs for labor, materials and other expenses not specifically provided for in other power plant operation accounts. Includes costs for custodial and other administrative services.

WORK CATEGORY DESCRIPTION: Operations of Power Plants.

Includes specific costs for the general supervision and engineering associated with the operation; routine materials, supplies, equipment and transportation costs; associated hired labor and contract support; and other costs: :

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of power plants including hydraulic generating stations, and their associated power intake structures, turbines, generators, auxiliary apparatus, switchgear, and other electrical or electronic equipment to the point where electricity leaves for transmission by the marketing agency or project. Includes miscellaneous costs such as custodial, administrative services and training power plant trainees including labor. Costs not specific to hydropower will be included in Work Category Code 60610.

WORK CATEGORY CODE: **60320 (60321-60324)** - Studies and Surveys for the Hydropower  
Function Costs for this function will be sub-divided as follows:

**60321** - Studies and Surveys - Supervision and Engineering, FERC #535. Costs for labor, materials and other expenses incurred in the general supervision of the operation of hydraulic generating stations. Direct supervision of specific activities will be charged to the appropriate accounts;

**60322** - Studies and Surveys - Hydraulic Expenses, FERC #537. Costs for labor, materials and other expenses incurred in operating power intake works whether or not the powerhouse is an integral part of the intake dam;

**60323** - Studies and Surveys - Electric Expenses, FERC #538. Costs for labor, materials and other expenses incurred in operating turbines, generators, auxiliary apparatus, switchgear and other electric equipment to the point where electricity leaves for transmission by the marketing agency or other project;

**60324** - Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses, FERC #539. Costs for labor, materials and other expenses not specifically provided for in other power plant operation accounts.

WORK CATEGORY DESCRIPTION: Studies and Surveys for hydropower features.

Includes all costs to prepare reconnaissance reports or studies related to the maintenance and rehabilitation of hydropower projects such as foundation reports, embankment criteria, O&M manuals, sediment surveys and hydraulic model analyses prior to the engineering and design phase.

WORK CATEGORY CODE: **60325** - Studies and Surveys for Hydropower - Major Rehabilitation  
Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for hydropower features.

Includes all costs for specific hydropower purposes to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60331** - Instrumentation, Data Collection and Analysis for Dam Safety  
related to the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing  
Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to hydropower features.

Includes all specific costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an

approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60332** - Formal Periodic Inspections and Reports for Dam Safety related to Hydropower Activities, FERC #537

WORK CATEGORY DESCRIPTION: Formal Periodic Inspections and Reports for Dam Safety related to hydropower features.

Includes all specific costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60333** - Dam Safety Assurance Studies related to the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Dam Safety Assurance Studies for Dam Safety activities related to hydropower features.

Includes all specific costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60341** - Water Management (Control and Quality) Activities for Hydropower - Analysis and Studies, FERC #537

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for hydropower features.

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and

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decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60342.

WORK CATEGORY CODE: **60342** - Water Management (Control and Quality) Activities for Hydropower - Operation of Water Control Data Systems, FERC #537

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for hydropower features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61340.

WORK CATEGORY CODE: **60350** - Real Estate Management for the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for hydropower features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60360** - Environmental Compliance Management for the Hydropower Function, FERC #539

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for hydropower features.

Includes all Hydropower operational costs to comply with applicable Federal environmental laws and regulations, including the National Environmental Policy Act (NEPA) Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance

assessment, external and internal. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance operational activities. related to the Hydropower function. Includes costs associated with implementation and maintaining and Environmental Management System (EMS). Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60370**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60380**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60391** – Facility Security Assessments for Hydropower

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for hydropower features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for hydropower features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60392, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61390.

WORK CATEGORY CODE: **60392** – Facility Security Guards, Monitoring Activities for Hydropower

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for hydropower features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60391, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61390.

WORK CATEGORY CODE: **60411** - Management of Natural Resources for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Management of Natural Resources and Operational Management Plans.

Includes all costs for the management and operations;

of natural resources to foster healthy and sustainable lands and waters, including the conservation and protection of soil, water, wetland, forest, vegetation, waterfowl, fish and wildlife, grasslands and range,

and other resources essential to the total management of specific projects; salaries, equipment, supplies; managing areas under license or outlease, spawning beds, fish shelters, fish and waterfowl impoundments; forest/woodland management activities, timber salvage, timber trespass surveillance, timber cruising, stand improvement, development and maintenance of fire lines, forest fire suppression, prescribed burning and haul road maintenance; conducting vegetation plantings, fertilization, maintain riparian vegetation, establishing wildlife food plots, manipulating vegetation; conducting wildlife habitat preservation management or improvement activities; range management; erosion control; conducting citation authority programs outside developed recreation areas that involve the protection of natural resources; conducting interpretive programs for the stewardship of natural resources; and boundary surveillance and routine, recurring maintenance of boundary monumentation required for protection of managed stewardship lands or environmentally sensitive areas. This Work Category excludes costs associated with fish hatcheries and fish passage. Natural resources activities conducted for the enhancement of recreation areas, e.g. management or control of nuisance wildlife including geese, nutria, woodchucks, and swallows in recreation areas, will be charged to Work Category Code 60511;

of Operational Management Plans, including all costs for salaries, supplies and materials, and equipment related to the preparation and updating of Operational Management Plans and supplements. Charges may include field units that perform data collection and analysis.

WORK CATEGORY CODE: **60412** - Management and Curation of Archeological and Cultural Resources

WORK CATEGORY DESCRIPTION: Management and Curation of Archeological and Cultural Resources.

Includes all costs for the management of, and annual maintenance curation costs for, archeological and cultural resources including identification, surveillance, studies, literature searches, reconnaissance surveys, inventory, subsurface testing, development and update of management plans and agreements for historical, archaeological and cultural resources, archeological and cultural resources outreach and educational programs, coordination with Tribal interests, operations activities associated with identified historical, archaeological and cultural resources, and enforcement of Title 36 Code of Federal Regulations, the National Historic Preservation Act of 1966, the Archeological Resources Protection Act of 1979 and other applicable laws and regulations. (Do not include funding requirements for activities to ensure compliance with Section 5-7 of the Native American Graves Protection and Repatriation Act (NAGPRA). These costs will be budgeted as a Remaining Items Activity. See para. C-2.13 of this Annex.). Costs for Orphan Collections are included in Work Category Code 60260.

WORK CATEGORY CODE: **60413** - Management of Natural Resources Mitigation Features

WORK CATEGORY DESCRIPTION: Management of Natural Resources Mitigation Features.

Includes all costs for the management and operations of authorized mitigation activities including costs to comply with mitigation requirements specified in Federal law, Congressional legislation, or in HQ approved project authorization decision document, to offset unavoidable natural resources and ecological losses caused by the construction of the project or by project operation activities. This Work Category does not include acquisition costs.

WORK CATEGORY CODE: **60414** - Fisheries Management - Operation of Fish Hatcheries

WORK CATEGORY DESCRIPTION: Fisheries Management – Operation of Fish Hatcheries.

Includes all costs for salaries, equipment, supplies and all costs associated with the operation, of fish hatcheries, egg collecting stations and related facilities for provision of fish propagation. It excludes fisheries development activities included in Work Category Code 60411.

WORK CATEGORY CODE: **60415** - Fisheries Management - Fish Hauling Activities and Fish Passage Structures

WORK CATEGORY DESCRIPTION: Fisheries Management - Fish Hauling Activities and Fish Passage Structures.

Includes all costs associated with operation of facilities and equipment for collecting, trapping, transportation and passage of fish at dams and navigation facilities. Facilities include ladders, nets, elevators and locks. It excludes fisheries development activities included in Work Category Code 60411.

WORK CATEGORY CODE: **60416** - Comprehensive Master Plans

WORK CATEGORY DESCRIPTION: Preparation and Updating of Comprehensive Master Plans and Master Plan Supplementals.

Includes all costs to initiate new, or continue ongoing, comprehensive Master Plans, including all costs for salaries, supplies and materials, and equipment related to the preparation and updating of Master Plans and Master Plan Supplements. Charges may include field units that perform data collection and analysis.

WORK CATEGORY CODE: **60417** – Shoreline Management

WORK CATEGORY DESCRIPTION: Shoreline Management

Includes all costs associated with managing permits issued under authority of Title 36 CFR, the Shoreline management Program. Includes costs for salaries, contracts, supplies, materials and equipment.

WORK CATEGORY CODE: **60418** – Management of Special Status Species for Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Management of Special Status Species for Environmental Stewardship

Includes all environmental stewardship program function costs for management and operations to support special status species. Includes costs for salaries, contracts, supplies, materials, and equipment to manage the conservation and recovery of special status species such as Federally or state listed endangered, threatened, rare or sensitive species, including activities in areas under license, lease or outgrant. Includes activities to determine and document the state or condition of a resource or population (e.g. surveys, inventories); activities to increase understanding and appreciation of special status species such as interpretive programs, signs, surveillance activities, GPS/GIS mapping, marking populations boundaries and exclusion zones. Also includes costs to prepare or update Management Plans for Special Status Species, such as data collection and analysis, plan development, review and coordination.

WORK CATEGORY CODE: **60419** – Pest Management for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Pest Management

Includes all costs for management and operations to support integrated pest management activities for the health and sustainability of natural resources. Includes costs of salaries, contracts, supplies,

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materials, and equipment to control pests, control invasive exotic species, control noxious weeds and animals. Includes activities undertaken to determine the state or condition of a resource, or to determine population densities to assess the likelihood of resources damage by pests, and activities to increase understanding and appreciation of pest management activities.

WORK CATEGORY CODE: **60421** – Studies, Surveys and Inventories for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Natural Resources Studies, Surveys and Inventories for environmental stewardship features, including Fisheries and Wildlife Development Activities.

Includes all costs of fish and wildlife studies, including fish hauling and passage analyses to support long-range development and modification of existing structures, applicable to a specific project and pro rata share of basin-wide fish and wildlife studies; inventorying the natural resources base through Level One and Level Two Natural Resources Inventories; includes all costs to conduct surveys of fish and wildlife; and all costs to perform population dynamics and other studies.

WORK CATEGORY CODE: **60422** – Studies, Surveys and Inspections of Completed Works – Ecosystem Restoration

WORK CATEGORY DESCRIPTION: Studies, Surveys and Inspections of Ecosystem Restoration Features at Completed Projects Operated by Others.

Includes all costs related to the inspection of Federally constructed, locally operated and maintained projects to ensure compliance with Project Cooperative Agreements. Includes inspection of ecosystem restoration features, observations regarding compliance with any access or easement restrictions, and minimal documentation of the condition of the ecosystem. Includes all costs for technical review and approval of sponsor-proposed alterations, improvements, excavation or construction within the project boundaries; advice given to sponsors related to the effects of such activities on the function/operation of the project and information on acceptable construction methods; all costs to update O&M Manuals; initial funding of reconnaissance or evaluation reports; PED for deficiency correction and reconstruction as applicable until Construction (C) funds are allocated.

WORK CATEGORY CODE: **60430**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60441** - Water Management (Control and Quality) Activities for Environmental Stewardship - Analysis and Studies

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for environmental stewardship features.

Includes all water management activity costs related to the conservation, protection, or enhancement of environmental stewardship features, e.g. natural aquatic communities, wetlands, including associated costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of

water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60442.

WORK CATEGORY CODE: **60442** - Water Management (Control and Quality) Activities for Environmental Stewardship - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for environmental stewardship features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61440.

WORK CATEGORY CODE: **60450** - Real Estate Management for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for environmental stewardship features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for environmental stewardship program purposes such as fish and wildlife habitat management, disposal of timber, and selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, as they relate to natural resources utilization or lands managed for natural resources. The general granting of land use to others and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits not supporting the environmental stewardship mission shall, in most instances, be charged to the grantee as administrative costs, including NEPA documentation costs. In cases where it is in the public interest for the Corps to absorb the costs, those costs should be charged to the primary mission of the project such as flood damage reduction or navigation. Also includes the preparation of Report of Availability (ROAs); Environmental Baseline Surveys (EBSs); Finding of Suitability to Lease (FOSLs) or Finding of Suitability to Transfer (FOSTs) for real estate transactions when such action primarily concerns the stewardship of natural resources and fish and wildlife activities.

WORK CATEGORY CODE: **60460** - Environmental Compliance Management for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for environmental

stewardship features.

Includes all Environment Stewardship operational costs to comply with applicable Federal laws and regulations as they relate to the management of natural resources, including the National Environmental Policy Act (NEPA) Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. [Environment Stewardship program costs to comply with requirements of the Endangered Species Act (ESA) should be charged to WCC 60418.] Includes cost to complete portions of annual external or internal environmental compliance assessment that are related to natural features or lands managed for fish and wildlife in accordance with Federal, DOD and Corps of Engineers requirements as described in the ERGO/TEAM environmental assessment manuals. Environmental compliance and inspections associated with Recreation such as concession inspections, visitor center inspections, maintenance shops that service recreation areas, marina inspections shall be charged to 60560. Cost associated with compliance and inspections for facilities associated with dam operations, levee works, pump station or maintenance areas that serve these functions shall be charged to 60560. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60470**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60480**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60491** – Facility Security Assessments for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Assessments, reviews, studies and analyses for environmental stewardship features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for environmental stewardship features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60492, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61490.

WORK CATEGORY CODE: **60492** – Facility Security Guards, Monitoring Activities for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Guards and Monitoring Activities for environmental stewardship features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60491, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61490.

WORK CATEGORY CODE: **60511** - Operations for the Recreation Function

WORK CATEGORY DESCRIPTION: Operations and Management of Recreation Areas and Facilities, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for recreation features.

Includes all costs for the management and operation; necessary materials, supplies, equipment, transportation and rental costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of recreation areas and facilities including all costs for salaries, per diem, travel, signs collecting and administering user fees, brochures, maps, participation in public and special events and exhibitions, costs of trash removal, cleanup, mowing, and gate or park attendants. Also includes operations costs for buildings, grounds, landscaping, removal of hazardous trees, control of vegetation, roads, bridges, parking areas, grills, tables, trails, playgrounds and permanent operating equipment utilized for recreation purposes;

to perform reservoir inspections and patrols for recreation purposes;

of project-owned permanent facilities for recreation purposes;

of all tools and permanent operating equipment including direct costs of automotive and other equipment assigned to the recreation function. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles.

Costs previously included in 60512, Operations and Management for the Recreation Function using Special Recreation Users Fee (SRUF) Funds, should be included here.

Costs previously included here for Visitor Centers operations and management should now be included in Work Category Code 60514.

WORK CATEGORY CODE:  
**60513** - Operations for the Recreation Function - Law Enforcement Agreements

WORK CATEGORY DESCRIPTION: Operations for recreation features - Costs and Supervision of Law Enforcement Agreements.

Includes all costs for cooperative agreements for law enforcement with states and their political subdivisions under PL 94-587, and all costs for technical and administrative charges, including project and district costs for administration of law enforcement agreements and activities.

WORK CATEGORY CODE: **60514** – Operation/management of Visitor Centers

WORK CATEGORY DESCRIPTION: Operations and Management of Visitors Centers.

Includes all costs for the management and operation; necessary materials, supplies, equipment, transportation and rental costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs of visitor centers. Includes all costs associated with visitor center operations, such as all personnel costs, custodial duties, supporting costs of cooperating

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associations, snow, ice and debris removal, lawn and shrubbery maintenance, landscaping, utilities, exhibits, grounds, heating and cooling systems, audio visual programs, building material, and equipment costs. These costs were formerly included in WCC 60511

WORK CATEGORY CODE: **60520** - Studies and Surveys for the Recreation Function

WORK CATEGORY DESCRIPTION: Studies and Surveys for recreation features.

Includes all costs to prepare visitor surveys, reports or studies related to the operation, maintenance and rehabilitation of recreation facilities.

WORK CATEGORY CODE: **60530**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60541** - Water Management (Control and Quality) Activities for Recreation - Analysis and Studies

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for recreation features.

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60542.

WORK CATEGORY CODE: **60542** - Water Management (Control and Quality) Activities for Recreation - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for recreation features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for

operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61540.

WORK CATEGORY CODE: **60550** - Real Estate Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for recreation features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property used for recreational purposes such as commercial concessions, public park and recreation, quasi-public and group camps. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, power line, and communication rights-of-way and other uses covered by easement, licenses, and permits that impact the recreational features of a project. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrant's, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states) on lands that support the recreational features of a project. Includes costs of utilization inspections of real property used for recreation under the control of or subject to a service agreement with the Corps of the Government and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166) for lands that support the recreation program of a project.

WORK CATEGORY CODE: **60550** - Real Estate Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for recreation features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60560** - Environmental Compliance Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for recreation features.

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**WORK CATEGORY DESCRIPTION:** Environmental Compliance Management for Recreation features. Includes all Recreational operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for recreation facilities and visitor centers. Includes cost to complete annual environmental compliance assessment, external and internal as inspections and findings related to recreational activities and in accordance with Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for recreation operations activities such as maintenance shops that support recreation, inspection of outgrants and concessions such as marinas, personnel training and management plans in spill prevention, hazard communication, pollution prevention, hazardous material, water resources, storage and handling of oil and pesticide management that support recreational activities. Includes costs associated with implementing and maintaining an Environmental Management System (EMS) for the recreational activities and support facilities (may be cost shared with other functions). Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included.

**WORK CATEGORY CODE:**     **60570**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE:**     **60580**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE:**     **60591** – Facility Security Assessments for Recreation

**WORK CATEGORY DESCRIPTION:** Facility Security – Assessments, reviews, studies and analyses for recreation features.

Includes all costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness for recreation features. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Costs for guards and surveillance activities are included in Work Category Code 60592, and costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61590.

**WORK CATEGORY CODE:**     **60592** – Facility Security Guards, Monitoring Activities for Recreation

**WORK CATEGORY DESCRIPTION:** Facility Security – Guards and Monitoring Activities for recreation features.

Includes all costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Costs for assessments are included in Work Category Code 60591, and costs to acquire, install and maintain structural and physical improvements for

security are included in Work Category Code 61590.

WORK CATEGORY CODE: **60610** - Joint Activities for Operations, FERC #535, #537, #538 and #539

WORK CATEGORY DESCRIPTION: Joint costs for Operations activities NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities may include the operation of Dams, Reservoirs, Levees, Other Non-Dam Multi-purpose Structures, Pumping Plants, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), gates, conduits, Permanent Operating Equipment, etc.

Includes all joint costs for the operation routine materials, supplies, equipment and transportation costs; hired labor and contract support associated with operations; and other costs:

of dam structures and appurtenant equipment such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to perform reservoir inspections and patrols, removal and control of trash and debris (excluding major periodic or one-time removal of growth and debris from the reservoir which should be included in maintenance accounts); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities, insect control and elimination of health and safety hazards;

of levees and other non-dam multi-purpose structures; vegetation control, removal of snow and ice from multi-purpose structures;

of pumping plants, pumps and associated equipment; collecting and maintaining operational records; routine replacement, purification and testing of insulating, lubricating and hydraulic oils; lubricants and lubricating equipment; minor maintenance of electrical equipment, cleaning, testing, and adjustment of motor starters, relays, meters, and similar equipment; minor maintenance of pumps, motors, engines, trash raking equipment, gate hoists, gates, fire fighting, and other equipment required for operation; minor maintenance of buildings, roads, and grounds; removal of debris, ice, and snow;

of project-owned permanent facilities such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from

project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Where space in other basic structures, such as a dam or powerhouse, is used in lieu of any above mentioned facilities, such allocated space is not separated from the basic structure. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery is charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories of all tools and equipment, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment not assigned to specific features. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles. Operating costs of permanent equipment assigned to specific functions will be charged to those functions.

WORK CATEGORY CODE: **60621** - Joint Activities for Studies and Surveys, FERC #535, #537, #538 and #539

WORK CATEGORY DESCRIPTION: Joint costs for Studies and Surveys including project condition surveys, dredging studies, etc. NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to perform studies or surveys for multi-purpose projects including sedimentation conditions and dredging studies.

WORK CATEGORY CODE: **60622** - Joint Activities for Studies and Surveys - Major Rehabilitation Evaluation Reports, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Studies and Surveys - Major Rehabilitation Evaluation Reports NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction (C) funds are allocated to the project.

WORK CATEGORY CODE: **60631** - Joint Activities for Instrumentation, Data Collection and Analysis for Dam Safety, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs of Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60632** - Joint Activities for Formal Periodic Inspections and Reports for Dam Safety, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Formal Periodic Inspections and Reports for Dam Safety NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60633** - Joint Activities for Dam Safety Assurance Studies, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Dam Safety Assurance Studies NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60641** - Joint Activities for Water Management (Control and Quality) - Analysis and Studies, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Joint costs for data collection are included in Work Category Code 60642.

WORK CATEGORY CODE: **60642** - Joint Activities for Water Management (Control and Quality) -

Operation of Water Control Data Systems, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Water Management (Control and Quality) Activities - Operation of Water Control Data Systems NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61640.

WORK CATEGORY CODE: **60650** - Joint Activities for Real Estate Management, FERC #539

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate Management including Compliance, and Utilization Inspections NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government. Includes reconciliation of financial records with flood damage reduction land and mineral lease receipts, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60660** - Joint Activities for Environmental Compliance Management, FERC #539

WORK CATEGORY DESCRIPTION: Joint costs for Environmental Compliance Management activities NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations. Includes cost to complete annual environmental compliance assessment, external or internal. Federal, DOD and Corps of Engineers

requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Includes costs associated with implementing and maintaining an Environmental Management System (EMS). Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **60670**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60680**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60691** – Joint Activities for Facility Security Assessments

WORK CATEGORY DESCRIPTION: Joint Costs for Facility Security – Assessments, reviews, studies and analyses NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to conduct and prepare security risk assessments, reviews, evaluations, studies and analyses for facility security related to criminal and terrorist activities. Includes costs to evaluate threats, consequences and security system effectiveness. Also includes costs to prepare or revise Emergency Action Plans and plans to address facility protection and security, training and appropriate coordination with other agencies as they relate to criminal and terrorist activities. Joint costs for guards and surveillance activities are included in Work Category Code 60692, and joint costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61690.

WORK CATEGORY CODE: **60692** – Joint Activities for Facility Security Guards, Monitoring Activities

WORK CATEGORY DESCRIPTION: Joint Costs for Facility Security – Guards and Monitoring Activities NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for guards and security system monitoring activities including training of personnel for facility security related to criminal and terrorist activities. Joint costs for assessments are included in Work Category Code 60691, and joint costs to acquire, install and maintain structural and physical improvements for security are included in Work Category Code 61690.

WORK CATEGORY CODE: **60711** - National Emergency Preparedness Program (NEPP) - Continuity of Operations

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Continuity of Operations activities.

Includes all costs required to develop, maintain and exercise Continuity of Operations Plans (COOP). Includes personnel and contracting costs for development of plans and Standard Operating Procedures (SOPs), training, participation in exercises and program management associated with USACE relocation

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and reconstitution missions as a result of either a natural or manmade (caused) disaster or emergency.

WORK CATEGORY CODE: **60712** - National Emergency Preparedness Program (NEPP) - National Preparedness Planning

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - National Preparedness Planning activities.

Includes all costs associated with, or in support of, deliberate planning for assigned catastrophic disaster response plans which ensure that Corps MSCs and districts can support the Nation during national emergency events. Includes personnel and contracting costs for deliberate planning, development of Standard Operating Procedures (SOPs), training, exercises, program management and coordination with related Federal, State, and local entities. Also includes costs associated with preparedness planning for Port Readiness and Military Assistance to Civil Disturbances.

WORK CATEGORY CODE: **60713** - National Emergency Preparedness Program (NEPP) - Support of Emergency Operations Centers (EOCs)

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Support of Emergency Operations Centers (EOCs)

WORK CATEGORY CODE: **60714** - National Emergency Preparedness Program (NEPP) - Emergency Water Program

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Emergency Water Program.

Includes all personnel and contracting costs for those activities required to execute E.O. 12656 related to the Emergency Water Program. (For HQUSACE use only.)

WORK CATEGORY CODE: **60715** - National Emergency Preparedness Program (NEPP) - Continuity of Government

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Continuity of Government.

Includes all personnel and contracting costs for those activities associated with Continuity of Government, including plans to support the Federal Emergency Management Agency (FEMA) and other Federal, State and local agencies in their efforts to reestablish civil authority lost as a result of natural or manmade (caused) disaster or an attack on the United States. (For HQUSACE use only as directed.)

WORK CATEGORY CODE: **60716** - National Emergency Preparedness Program (NEPP) - Training and Exercises

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Training and Exercises.

Includes all costs for the development of and the participation in catastrophic disaster training and exercises in the inter- and intra-agency arena.

WORK CATEGORY CODE: **60811** - Operations for Water Supply

WORK CATEGORY DESCRIPTION: Operations of Project Gates, Specific Water Supply Conduits, Permanent Operating Equipment, etc. for water supply features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs: of project gates, specific water supply conduits and permanent operating equipment specifically for water supply. Prior to FY 07, these costs have been included in WCC 60210.

WORK CATEGORY CODE: **60812** - Water Supply Agreements

WORK CATEGORY DESCRIPTION: Development and Renegotiation of Water Supply Agreements.

Includes all labor and associated costs involved in the development of new water supply agreements and for costs required for existing water supply agreements such as billings and collections including delinquencies, lawsuits and modifications and renegotiations of such agreements. Prior to FY 07, these costs have been included in WCC 60210.

WORK CATEGORY CODE: **60820** - Studies and Surveys for the Water Supply Function

WORK CATEGORY DESCRIPTION: Studies and Surveys for water supply features.

Includes all costs to prepare new or continuing reports associated with the reallocation of an existing project purpose to water supply. Prior to FY 07, these costs have been included in WCC 60221.

**Section C-4.3d**  
**Work Category Codes and Definitions**  
**O&M Maintenance Accounts By Business Line:**

Navigation (611--)  
Flood Damage Reduction (612--)  
Hydropower (613--)  
Environmental Stewardship (614--)  
Recreation (615--)  
Joint Activities (616--)  
Reserved (617--)  
Water Supply (618--)

A Breakdown of Work Category Codes (WCCs) and descriptions under these functions is on the following pages:

WORK CATEGORY CODE:  
61110 - Maintenance for the Navigation Function

WORK CATEGORY DESCRIPTION: Maintenance of Locks, Dams, Reservoirs, Dikes, Revetments, Breakwaters, Jetties, Seawalls, Piers, Levees and Similar Structures, Service Facilities, Permanent Operating Equipment, etc. excluding dredging activities for navigation features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment for non-Water Management activities:

of lock and salt water control structures and facilities for passage of waterborne traffic, including gates, valve operating machinery, lock walls, and guide and guard-walls including dolphins within the lock approaches for tie up, guard, or guide purposes;

of facilities and equipment for dams, spillways, outlet works and auxiliary dams;

of reservoirs and facilities including floating trash booms, trash racks, erosion control, drainage, major periodic or one time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60110); rim grouting or mine sealing, etc., to prevent leakage;

of revetments, dikes, groins, breakwaters, jetties, seawalls, piers, levees and similar structures provided in seas, lakes, rivers, canals, exposed tidal waters, and harbors;

of non-dredging navigation channel maintenance including snagging, clearing, aquatic plant removal, removal of sunken vessels, drift removal, rock and other debris removal;

of buildings, grounds, utilities, and roads, railroads and bridges, such as administration and shop

buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes direct costs for project utilities including electrical, gas, water, and sewer systems;

of permanent operating equipment;

of buildings, grounds and utilities that are part of the hydraulic models in South Pacific Division;

and for instrumentation on lock facilities and dam structures including all costs for the installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

**WORK CATEGORY CODE: 61121 - Dredging Activities for the Navigation Function**

**WORK CATEGORY DESCRIPTION:** Dredging of Channels and Canals for navigation activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for maintenance dredging and disposal activities of navigation channels and canals, except project condition sediment survey costs which are included in Work Category Code 60121. Includes costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. Costs for long-range environmental requirements are included in Work Category Code 60123. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

**NOTE:** Line item submissions for Corps-owned hopper dredges should be separate from line item submissions for any other dredges.

**WORK CATEGORY CODE: 61122 - Dredging - Construction and Maintenance of Dredged Material Disposal Facilities for the Navigation Function**

**WORK CATEGORY DESCRIPTION:** Construction and Maintenance of Disposal Facilities for Dredged Materials for navigation features.

Includes all costs for the construction and the maintenance of dredged material disposal facilities including confined disposal facilities, and costs for required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation, and equipment usage.

**WORK CATEGORY CODE: 61130 – Dam Safety Remediation of Deficiencies for the Navigation Function**

**WORK CATEGORY DESCRIPTION:** Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate for navigation features.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the

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National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter dam safety related work, the costs should be included in the primary business program for that project. In previous years these costs were included in WCC 61110. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

WORK CATEGORY CODE: **61140** - Water Management (Control and Quality) Equipment for the Navigation Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for navigation features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61151** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for navigation features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61152** - Real Estate - Resolution of Real Estate Encroachments for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for navigation features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. The costs for boundary line surveys and remarking are included in Work Category Code 61153.

WORK CATEGORY CODE: **61153** - Real Estate - Boundary Monumentation and Rectification for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for navigation features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61160** - Environmental Compliance (Remedial Actions) for the Navigation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Locks, Dams, Reservoirs, Breakwaters, Jetties, Seawalls, Piers, Levees, Other Control Structures, Pumping Plants, Other Facilities, Channels and Canals for navigation features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for locks, dams, reservoirs, breakwaters, jetties, seawalls, piers, levees, other control structures, pumping plants, other facilities, channels and canals. Includes cost for corrective actions related to environmental compliance assessment findings related to the Navigation function. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61170** - O&M Major Rehabilitation Projects for the Navigation Function

WORK CATEGORY DESCRIPTION: Remaining O&M Funded Major Rehabilitation projects for navigation features.

Includes all major rehabilitation costs such as repair, replacement, additions and efficiency improvements to lock structures and facilities for passage of waterborne traffic, and all costs for facilities and equipment for dams, spillways, outlet works and auxiliary dams including gates, valve operating machinery, lock walls, and guide and guard-walls including dolphins within the lock approaches for tie up, guard, or guide purposes.

NOTE: Major rehabilitation, deficiency correction, and reconstruction projects are programmed for initial

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Construction (C) appropriation and Inland Waterways Trust Fund moneys, as appropriate, only after applicable reconnaissance and/or evaluation reports have been approved. Work items for Major Rehabilitation Evaluation Reports are included in Work Category Code 60122. This Work Category will be used only until O&M funded Major Rehabilitation projects are completed.

WORK CATEGORY CODE: **61180**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61191** – Facility Security Maintenance and Replacement for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for navigation features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60191, and costs for guards and surveillance activities are included in WCC 60192. Costs for improvements and modifications are included in WCC 61192. Includes some costs formerly included in WCC 61190.

WORK CATEGORY CODE: **61192** – Facility Security Physical Improvements and Modifications for Navigation

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for navigation features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61190.

WORK CATEGORY CODE: **61211** - Maintenance for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Maintenance of Dams, Reservoirs, Levees, Floodwalls, Hurricane Barriers, and Other Flood Damage Reduction Structures; Snagging, Clearing, Aquatic Plant Removal, Rock and Other Debris Removal, and Other Non-Dredging Flood Damage Reduction Channel Maintenance; Pumping Plants, Other Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Maintenance and Purchase of Permanent Operating Equipment for Non-Water Control Management Activities; etc. excluding dredging for flood damage reduction features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment for non-Water Management activities:

of facilities and equipment for dams, spillways, outlet works and auxiliary dams;

of reservoirs and facilities including floating trash booms, trash racks, erosion control, drainage, major periodic or one-time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60210); and rim grouting or mine sealing, etc., to prevent leakage;

of levees, floodwalls, hurricane barriers, embankments, walls, in-channel structures, and other flood damage reduction structures to protect areas from inundation; and snagging, clearing, debris removal, and non-dredging flood damage reduction channel maintenance. This includes direct costs for removal of trees, brush, accumulated snags, drifts, and debris from canals and waterways for flood damage reduction and major drainage purposes; and channel improvement structures and revetments, linings, dikes, jetties, bulkheads, and buildings (when provided for flood damage reduction);

of pumping plants including such items as buildings, pumps, and prime movers including power supplies, controls, piping, and all other associated facilities;

of buildings, grounds, utilities, and roads, railroads and bridges, such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes direct costs for project utilities including electrical, gas, water, and sewer systems; of permanent operating equipment;

and for instrumentation on dam structures and levees, floodwalls, hurricane barriers, and other flood damage reduction structures including all costs for the installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

Costs for Water Supply activities formerly charged to this Work Category Code should now be charged to Work Category Code 61810.

**WORK CATEGORY CODE: 61212 - Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for Mississippi River and Tributaries (MR&T) Flood Damage Reduction**

**WORK CATEGORY DESCRIPTION:** Maintenance of Dikes, Revetments, Groins, Breakwaters, Jetties, Seawalls and Similar Structures for MR&T flood damage reduction purposes.

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of revetments, dikes, groins, breakwaters, seawalls, piers, linings, training dikes, bulkheads and similar structures. Also includes related costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs, equipment usage, associated government plant and hired labor for project maintenance, contract support, and other costs.

**WORK CATEGORY CODE: 61221 - Dredging Activities for the Flood Damage Reduction Function**

**WORK CATEGORY DESCRIPTION:** Dredging of Channels and Canals for flood damage reduction

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activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for dredging, excavation and disposal activities for the maintenance and efficiency improvements of channels and canals for flood damage reduction purposes, except project condition sediment survey costs which are included in Work Category Code 60221. Includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; and creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61222** - Dredging - Construction and Maintenance of Disposal Facilities for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for flood damage reduction features.

Includes all costs for the construction and the maintenance of dredged material disposal facilities including confined disposal facilities, and required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61230** - Dam Safety Remediation of Deficiencies for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate for navigation features.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter dam safety related work, the costs should be included in the primary business program for that project. In previous years these costs were included in WCC 61110. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

WORK CATEGORY CODE: **61240** - Water Management (Control and Quality) Equipment for the

Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for flood damage reduction features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61251** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for flood damage reduction features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61252** - Real Estate - Resolution of Real Estate Encroachments for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for flood damage reduction features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking are included in Work Category Code 61253.

WORK CATEGORY CODE: **61253** - Real Estate - Boundary Monumentation and Rectification for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for flood damage reduction features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances

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there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61260** - Environmental Compliance (Remedial Actions) for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Dams, Breakwaters, Jetties, Seawalls, Levees, Floodwalls, Hurricane Barriers, Other Flood Damage Reduction Structures, Pumping Plants, Other Facilities, Channels and Canals for flood damage reduction features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for dams, breakwaters, jetties, seawalls, levees, floodwalls, hurricane barriers, other flood damage reduction structures, pumping plants, other facilities, channels and canals. Includes cost for corrective actions related to environmental compliance assessment findings related to flood damage reduction activities. Costs include salaries of environmental compliance coordinators and administration, contaminant detection, waste analysis, site investigations, site remediation of recent and past releases or contamination resulting from Flood Damage Reduction activities; treatment system installation, repair or renovation, erosion protection of structures or pool, responding to spills from FDR facilities, disposal of unclaimed barrels or containers, and responding or clean-up of pesticide or chemical releases that flood damage reduction activities on Corps or outgranted lands. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61270**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61280**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61291** – Facility Security Maintenance and Replacement for Flood Damage Reduction

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for flood damage reduction features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60291, and costs for guards and surveillance activities are included in WCC 60292. Costs for improvements and modifications are included in WCC 61292. Includes some costs formerly included in WCC 61290.

WORK CATEGORY CODE: **61292** – Facility Security Physical Improvements and Modifications for Flood Damage Reduction

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for

flood damage reduction features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61290.

WORK CATEGORY CODE: **61310 (61311-61314)** Maintenance for the Hydropower Function Costs for this function will be sub-divided as follows:

**61311** Maintenance Supervision, FERC #541. Costs for labor, materials and expenses incurred in the general supervision of maintenance of hydraulic power generating stations. Direct supervision of specific jobs is charged to the appropriate maintenance feature;

**61312** Maintenance of Hydraulic Structures, FERC #542. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the powerhouse, and power intake works whether or not the powerhouse is an integral part of the intake dam;

**61313** Maintenance of Electric Plant, FERC #544. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant generating and accessory electrical and mechanical equipment, and switchyard electrical and mechanical equipment;

**61314** - Maintenance of Miscellaneous Hydraulic Plant, FERC #545. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant and switchyard hydraulic plant.

WORK CATEGORY DESCRIPTION: Maintenance of Power Plants, excluding dredging for hydropower features.

Includes all costs for power plant maintenance and repair, replacements, additions and efficiency improvements to, and retirement of all power plant structures; of facilities and equipment required for production, transmission, and distribution of electrical power, including but not limited to the power plant, spillway, low flow bypass systems, storage facilities, turbines, motors, pumps, generators, and governors; of all accessory electrical or electronic equipment and control systems; of all water, air, and oil systems; of all intake structures with electrical and mechanical equipment; of the tailrace, switchyard, transformer yard, elevators, trash racks; and of lighting and interior power distribution systems, cable tunnels and conduit runs; and installation of instrumentation. Includes spare parts, special and regular tools, supplies and equipment, scaffolding, and rental of specialized equipment. Includes labor and materials, and incidental expenses incurred to maintain maintenance records; expenses incurred by the power plant management and support staff in the general supervision of the maintenance of the hydraulic generating station; and transportation and per diem costs required to perform power plant maintenance functions. Dredging is included in Work Category Code 61320.

WORK CATEGORY CODE: **61320** - Dredging Activities for the Hydropower Function, FERC #543

WORK CATEGORY DESCRIPTION: Dredging for hydropower activities including all disposal activities.

Includes all costs for maintenance dredging and disposal activities, except project condition sediment

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survey costs which are included in Work Category Code 60321. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61330** – Dam Safety Remediation of Deficiencies for the Hydropower Function

WORK CATEGORY DESCRIPTION: Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate for hydropower features.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter dam safety related work, the costs should be included in the primary business program for that project. In previous years these costs were included in WCCs 61311-61314. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

WORK CATEGORY CODE: **61340** - Water Management (Control and Quality) Equipment for the Hydropower Function, FERC #542

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for hydropower features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61351** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for hydropower features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61352** - Real Estate - Resolution of Real Estate Encroachments for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Real Estate - Resolution of Real Estate Encroachments for hydropower features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. The costs for boundary line surveys and remarking are not included in this Work Category.

WORK CATEGORY CODE: **61353** - Real Estate - Boundary Monumentation and Rectification for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Real Estate - Boundary Monumentation and Rectification for hydropower features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61360** - Environmental Compliance (Remedial Actions) for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Dams, Levees, Other Control Structures, Power Plants, Pumping Plants, and Other Facilities for hydropower features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for dams, levees, other control structures, power plants, pumping plants, and other facilities. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Includes cost for corrective actions related to environmental compliance assessment findings related to the Hydropower function

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WORK CATEGORY CODE: **61370 (61371-61374)** - O&M Major Rehabilitation Projects for the Hydropower Function Costs for this function will be further subdivided as follows:

**61371** - Comprehensive Replacement Supervision, FERC #541. Costs for labor, materials and expenses incurred in the supervision of the comprehensive replacement of hydraulic power generating stations. Direct supervision of specific jobs is charged to the appropriate maintenance feature;

**61372** - Comprehensive Replacement of Structures, FERC #542. Costs for labor, materials and expenses incurred in the comprehensive replacement of the powerhouse, switchyard, and power intake works whether or not the powerhouse is an integral part of the intake dam;

**61373** - Comprehensive Replacement of Electric Plant, FERC #544. Costs for labor, materials and expenses incurred in the comprehensive replacement of the power plant generating and accessory electrical and mechanical equipment, and switchyard electrical and mechanical equipment;

**61374** - Comprehensive Replacement of Miscellaneous Hydraulic Plant, FERC # 545. Costs for labor, materials and expenses incurred in the comprehensive replacement of the power plant and switchyard hydraulic plant.

WORK CATEGORY DESCRIPTION: Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) projects for hydropower features.

Includes all costs for comprehensive major rehabilitation, replacement, repair, additions and efficiency improvements, including supervision, of all power plant structures, electric plant, miscellaneous hydraulic plant, power plant intake works; of facilities and equipment required for production, transmission, and distribution of electrical power, including but not limited to the power plant, spillway, low flow bypass systems, storage facilities, turbines, motors, pumps, generators, and governors; of all accessory electrical or electronic equipment and control systems; of all water, air, and oil systems; of all intake structures with electrical and mechanical equipment; of the tailrace, switchyard, transformer yard, elevators, trash racks; and of lighting and interior power distribution systems, cable tunnels and conduit runs. Includes labor and materials, special and regular tools, supplies and equipment, scaffolding, and rental of specialized equipment. See Work Category Codes 61310 (61311-61314) and 613N0 (613N1-613N4).

NOTE: Major Rehabilitation work is now funded under the Construction (C) appropriation. Work items for Major Rehabilitation Evaluation Reports are included in Work Category Code 60325. This Work Category will be used only until current O&M funded Major Rehabilitation projects are completed.

WORK CATEGORY CODE: **61380**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61391** – Facility Security Maintenance and Replacement for Hydropower

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for hydropower features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or

temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60391, and costs for guards and surveillance activities are included in WCC 60392. Costs for improvements and modifications are included in WCC 61392. Includes some costs formerly included in WCC 61390.

WORK CATEGORY CODE: **61392** – Facility Security Physical Improvements and Modifications for Hydropower

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for hydropower features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61390.

WORK CATEGORY CODE: **61411** - Maintenance of Natural Resource Facilities for Environmental Stewardship function

WORK CATEGORY DESCRIPTION: Maintenance of Natural Resource Facilities.

Includes all costs to perform maintenance needed to foster healthy and sustainable lands and waters, and to conserve and protect natural resources and associated facilities located on project lands. This Work Category only includes costs during the conservation or protection effort.

WORK CATEGORY CODE: **61412** - Mitigation of Archeological and Cultural Resources

WORK CATEGORY DESCRIPTION: Mitigation of Archeological and Cultural Resources such as Sites, Structures, and Objects.

Includes all costs to manage, curate, maintain and rehabilitate identified archeological collections and associated documentation and long term collections management. Also includes cultural resources mitigation costs to protect, recover, preserve or otherwise mitigate significant archaeological, historical, and cultural buildings, sites, structures or objects. This Work Category only includes costs during the recovery, preservation, or mitigation effort.

WORK CATEGORY CODE: **61413** - Maintenance of Natural Resources Mitigation Features

WORK CATEGORY DESCRIPTION: Maintenance of Natural Resources Mitigation Features.

Includes all costs for the maintenance and repair of natural resources mitigation features to comply with mitigation requirements specified in Federal law, Congressional legislation, or in HQ approved project authorization decision document,. to offset unavoidable natural resources and ecological losses caused by the construction of a project or by project operation activities. This Work Category only includes costs during the mitigation effort.

WORK CATEGORY CODE: **61414** - Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures

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WORK CATEGORY DESCRIPTION: Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures for environmental stewardship features.

Includes all costs for maintenance and repair of fish hatcheries, egg collection stations, transportation equipment, and fish passage facilities.

WORK CATEGORY CODE: **61418** – Maintenance of Special Status Species for Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Maintenance of Special Status Species for environmental stewardship features.

Includes all costs for maintenance of resources and features supporting special status species. Includes costs of salaries, contracts, equipment, supplies and materials to protect and maintain species of special concern such as Federal or state listed endangered, threatened, rare or sensitive species, including activities in areas under license, lease, or outgrant. Includes activities undertaken to maintain a resource, population, habitat or management feature, such as vegetation manipulation, timber management, prescribed burning, and activities to protect populations and individual specimens (e.g. citation authority program, surveillance activities, identifying and monitoring exclusion zones). The cost of special status species maintenance that is a function of activities of another business line, e.g. navigation, shall be funded by that business line as a cost of doing business, using work category codes associated with the appropriate business line.

WORK CATEGORY CODE: **61421** - Dredging Activities for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Dredging of Channels and Canals for environmental stewardship activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for maintenance dredging of project channels and canals, and disposal activities, except project condition sediment survey costs which are included in Work Category Code 60420. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; and creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61422** - Dredging - Construction and Maintenance of Disposal Facilities for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for environmental stewardship features.

Includes all costs for the construction and the maintenance of disposal facilities including confined disposal facilities, and required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61430**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61440** - Water Management (Control and Quality) Equipment for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for environmental stewardship features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61451** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for environmental stewardship features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61452** - Real Estate - Resolution of Real Estate Encroachments for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate - Resolution of Real Estate Encroachments for environmental stewardship features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking are included in Work Category Code 61453.

WORK CATEGORY CODE: **61453** - Real Estate - Boundary Monumentation and Rectification for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate - Boundary Monumentation and Rectification for environmental stewardship features.

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Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61460** - Environmental Compliance (Remedial Actions) for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) of Natural Resources including Other Service Facilities for environmental stewardship features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for natural resources and other environmental stewardship features. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included.

WORK CATEGORY CODE: **61470**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61480**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61491** – Facility Security Maintenance and Replacement for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for environmental stewardship features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60491, and costs for guards and surveillance activities are included in WCC 60492. Costs for improvements and modifications are included in WCC 61492. Includes some costs formerly included in WCC 61490.

WORK CATEGORY CODE: **61492** – Facility Security Physical Improvements and Modifications for Environmental Stewardship

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for environmental stewardship features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting,

communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61490.

**WORK CATEGORY CODE: 61511 - Maintenance of Recreation Features**

**WORK CATEGORY DESCRIPTION:** Maintenance of Recreation areas and Facilities, Service Facilities – (Buildings, Grounds, Utilities, Roads and Bridges), Erosion Control in Recreation Areas, and Maintenance and Purchase of Permanent Operating Equipment for recreation features.

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of, recreation facilities and structures such as grills, tables, playgrounds, trails, campgrounds, picnic areas, restrooms, showers, boat ramps, parking areas, roads, grounds, utilities associated with recreation use, buildings used for recreation purposes or the collection of fees and other structures used to support the recreation function. Also included are the costs for realignment, overlay, grading, and widening, of roads, parking areas, bridges and walkways associated with recreational development, and all costs for control of erosion endangering recreational areas or facilities, including seeding, sodding, riprap, gabions, vegetation, retaining walls and other measures. Also includes the costs for permanent operating equipment such as backhoe, trencher, bucket truck, tractor loader, vehicles, communications equipment, and computers used to support the recreation function of the project. This Work Category also includes costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs and equipment usage, and costs to bring facilities up to modern design standards and to provide accessibility for persons with disabilities as required. Includes costs for new recreation facilities, if the goal of providing quality public recreation experiences with the most cost efficient management of water resources development projects can be met.

This Work Category Code includes costs previously included in Work Category Code 61512, Maintenance of Recreation Facilities using SRUF funds (see paragraph C-2.15 SRUF).

SRUF costs previously included under Work Category Code 61512 should now be included under Work Category Code 61511.

**WORK CATEGORY CODE: 61513 - Maintenance of Recreation Features - Cost Shared Recreation Developments**

**WORK CATEGORY DESCRIPTION:** Cost Shared Recreation Developments - Contracts and Negotiations.

Includes all recreation cost share agreements and contract costs; costs to reimburse local sponsors; and costs for monitoring and negotiating agreements related to cost sharing.

**WORK CATEGORY CODE: 61514 – Maintenance of Visitor Centers**

**WORK CATEGORY DESCRIPTION:** Maintenance of Visitor Centers for recreation features.

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of, visitor center buildings, displays, audiovisual systems, heating and cooling systems, landscaping, grounds, exhibits and utilities. Also includes costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs and equipment usage. These costs were formerly included in WCC 61511.

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WORK CATEGORY CODE: **61515** – Modernization of Recreation Features

WORK CATEGORY DESCRIPTION: Modernization of recreation features.

Includes all costs for the modernization, replacement or additions for modernization to recreation facilities and structures such as trails, campgrounds, picnic areas, restrooms, showers, boat ramps, parking areas, roads, grounds, utilities associated with recreation use, buildings used for recreation purposes or the collection of fees and other structures used to support the recreation function. Also includes costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs and equipment usage, and costs to bring facilities up to modern design standards and to provide accessibility for persons with disabilities as required. Also, includes costs for E&D and P&S for the Recreation Modernization Program. Work should be included in this Work Category Code (WCC) rather than WCC 61511 if the primary reason for the work is to update existing facilities to meet current guidelines and user needs, as well as modifying facilities and services to improve efficiency and effectiveness. If the primary reason to do work is non-operational maintenance, it should be included in WCC 61511, even if some modernization will be accomplished in conjunction with the work. These costs were formerly included in WCC 61511.

WORK CATEGORY CODE: **61520** - Dredging Activities for the Recreation Function

WORK CATEGORY DESCRIPTION: Dredging for recreation activities including all disposal activities.

Includes all costs for maintenance dredging and disposal activities for the recreation function, except project condition sediment survey costs which are included in Work Category Code 60520. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. Also includes all costs associated with the disposal of dredged materials as sand on beaches, and related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61530**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61540** - Water Management (Control and Quality) Equipment for the Recreation Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for recreation features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality) for the recreation function. This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the Corps new Water Management System (SWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61551** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for recreation features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping surveying, title evidence, inspection, closing, audits and temporary permits necessary to acquire or dispose of lands and interests that support the recreational features of a project.

WORK CATEGORY CODE: **61552** - Real Estate - Resolution of Real Estate Encroachments for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate - Resolution of Real Estate Encroachments for recreation features.

Includes all costs for the resolution of all encroachments on projects lands classified for recreational use and degradation of public lands and encroachments adversely affecting the recreational use of the project; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking should be included in Work Category Code 61553.

WORK CATEGORY CODE: **61553** - Real Estate - Boundary Monumentation and Rectification for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate - Boundary Monumentation and Rectification for recreation features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed on lands classified for recreational use at a project.

WORK CATEGORY CODE: **61560** - Environmental Compliance (Remedial Actions) for the Recreation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for recreation features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal environmental laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for recreation facilities and visitor centers. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, and modification. Other costs associated with compliance include activities such as responding to marinas spills, updating hazard communication, disposal of unclaimed barrels or containers, and responding or clean-up of pesticide or chemical releases that support recreational activities on Corps owned land. Costs associated with medical surveillance and other employee health and safety requirements are not included.

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WORK CATEGORY CODE: **61570**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61580**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61591** – Facility Security Maintenance and Replacement for Recreation

WORK CATEGORY DESCRIPTION: Facility Security – Maintenance and Replacement for recreation features.

Includes all costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Costs for assessments are included in Work Category Code (WCC) 60591, and costs for guards and surveillance activities are included in WCC 60592. Costs for improvements and modifications are included in WCC 61592. Includes some costs formerly included in WCC 61590.

WORK CATEGORY CODE: **61592** – Facility Security Physical Improvements and Modifications for Recreation

WORK CATEGORY DESCRIPTION: Facility Security – Physical Improvements and Modifications for recreation features.

Includes all costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Includes some costs formerly included in WCC 61590.

WORK CATEGORY CODE: **61610** - Joint Activities for Maintenance excluding Dredging, FERC #541, #542, #543, #544 and #545

WORK CATEGORY DESCRIPTION: Joint costs for Maintenance activities NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities include maintenance of Dams, Reservoirs, Levees, Floodwalls, Hurricane Barriers, and Other Control Structures; Snagging, Clearing, Aquatic Plant Removal, Rock and Other Debris Removal, and Other Non-Dredging Channel Maintenance; Pumping Plants, Other Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Gates, Conduits, Maintenance and Purchase of Permanent Operating Equipment, etc. excluding dredging.

Includes all joint costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related joint costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment:

of joint use facilities and equipment for dams, spillways, outlet works and auxiliary dams;

of reservoirs and facilities including floating trash booms, trash racks, erosion control, drainage, major periodic or one time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60610); and rim grouting or mine sealing, etc., to prevent leakage;

of levees, floodwalls, hurricane barriers, embankments, walls, in-channel structures, and other control structures to protect areas from inundation; snagging, clearing, debris removal; and non-dredging channel maintenance. This includes costs for removal of trees, brush, accumulated snags, drifts, and debris from canals and waterways; and channel improvement structures, revetments, linings, dikes, jetties, bulkheads, and buildings;

of pumping plants including such items as buildings, pumps, and prime movers including power supplies, controls, piping, and all other associated facilities;

of non-dredging channel maintenance including snagging, clearing, aquatic plant removal, removal of sunken vessels, drift removal, rock and other debris removal;

of buildings, grounds, utilities, and roads, railroads and bridges, such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes costs for project utilities including electrical, gas, water, and sewer systems;

of permanent operating equipment;

and for instrumentation on dam structures, levees, floodwalls, hurricane barriers, and other control structures including costs related to installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **61621** - Joint Activities for Dredging, FERC #543

WORK CATEGORY DESCRIPTION: Joint costs for Dredging of Channels and Canals NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities include all disposal activities such as confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all joint costs for maintenance dredging of project channels and canals, and disposal activities, except for project condition sediment survey costs which are included in Work Category Code 60621. Also included are joint costs to obtain environmental clearances to perform the associated dredging. Long-range environmental requirements and costs for initial project condition surveys are included in related operations accounts. Also includes joint costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; the creation or restoration of wetlands or other aquatic habitat using dredged material; and the creation of land using dredged material. Also includes related joint costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61622** - Joint Activities for Dredging - Construction and Maintenance of

Dredged Material Disposal Facilities, FERC #543

**WORK CATEGORY DESCRIPTION:** Joint costs for the Construction and Maintenance of Disposal Facilities for Dredged Materials NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the construction and the maintenance of disposal facilities, including confined disposal facilities, for dredged materials. Also includes related joint costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

**WORK CATEGORY CODE:**     **61630** - Joint Activities for Dam Safety Remediation of Deficiencies

**WORK CATEGORY DESCRIPTION:** Joint costs for Remediation of Safety Deficiencies for Dams, Levees and Other Structures as appropriate NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all direct costs for the non-routine repair, replacement and corrections to all dams included in the National Inventory of Dams plus any levees, diversion structures and related appurtenances maintained at Federal expense to remediate dam safety deficiencies. Includes related costs for contracts, parts, replacements, special tools, supplies and materials, government plant, hired labor to include contract support, transportation costs and other costs required to perform this work. Specifically, this includes non-routine maintenance and/or repair work for dams and pertinent structures and levees that have either been identified by any means as having a Dam Safety Deficiency or has been concurred to be deficient by the District Commander, his appointed Dam Safety Officer or District Dam Safety Program Manager. Dam Safety maintenance or repair work may be identified by any means such as a study, criteria review, or any scheduled or unscheduled inspection. Dam safety related work such as inspections, inspection reports, rehabilitation reports, studies, surveys, and instrumentation will be categorized under the existing Work Category Codes in accordance with current practice. Only the actual work to include the associated plans and specifications (P&S), engineering and design (E&D) for the repairs or remedial corrections will be included in this Work Category Code as appropriate. For those business programs that do not specifically have a Work Category Code for Dam Safety (61130, 61230 and 61330) yet may encounter dam safety related work, the costs should be included in the primary business program for that project. Costs are only included in this Work Category Code if they meet the above definition for Dam Safety. Costs for regular, recurring maintenance activities will not be included in this WCC.

**WORK CATEGORY CODE:**     **61640** - Joint Activities for Water Management Equipment, FERC #542

**WORK CATEGORY DESCRIPTION:** Joint costs for the Purchase and Maintenance of Water Management (Control and Quality) Equipment NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the Corps new Water Management System (SWMS). This also includes costs for maintenance and support of CWMS.

**WORK CATEGORY CODE:**     **61651** - Joint Activities for Real Estate - Land Acquisition and Disposal

## Management Activities, Settlement of Claims, and Audits, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests, real estate payments for acquisition of real property and interests therein, and costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired.

WORK CATEGORY CODE: **61652** - Joint Activities for Real Estate - Resolution of Real Estate Encroachments, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Resolution of Real Estate Encroachments NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting.

WORK CATEGORY CODE: **61653** - Joint Activities for Real Estate - Boundary Monumentation and Rectification, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Boundary Monumentation and Rectification NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions; and costs to survey and mark boundary lines where not previously completed.

WORK CATEGORY CODE: **61660** - Joint Activities for Environmental Compliance (Remedial Actions), FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Environmental Compliance (remedial actions) NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply. These activities include actions for Dams, Levees, Other Control Structures, Pumping Plants and Other Project Facilities.

Includes all joint costs maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EO 13148, and applicable state and local regulations for dams, reservoirs, levees, other control structures, pumping plants and other joint use project facilities. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety

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requirements are not included.

WORK CATEGORY CODE: **61670**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61680**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61691** – Joint Activities for Facility Security Maintenance and Replacement

WORK CATEGORY DESCRIPTION: Joint Costs for Facility Security – Maintenance and Replacement NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs to maintain and replace structural improvements for facility protection and security related to criminal and terrorist activities. Includes joint costs to maintain, repair or replace permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Joint costs for assessments are included in Work Category Code 60691, and costs for guards and surveillance activities are included in Work Category Code 60692.

WORK CATEGORY CODE: **61692** – Joint Activities for Facility Security Physical Improvements and Modifications

WORK CATEGORY DESCRIPTION: Joint Costs for Facility Security – Physical Improvements and Modifications NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation and Water Supply.

Includes all joint costs for engineering and design, and to acquire and install structural improvements, modifications and physical improvements for facility protection and security related to criminal and terrorist activities. Includes joint costs for permanent or temporary barriers, fencing, traffic signs, lighting, communications equipment, intrusion detection systems such as video surveillance equipment and cameras, and access control. Joint costs for assessments are included in Work Category Code 60691, and costs for guards and surveillance activities are included in Work Category Code 60692.

WORK CATEGORY CODE: **61810** - Maintenance for the Water Supply Function

WORK CATEGORY DESCRIPTION: Maintenance of Project Gates, Water Supply Conduits, Permanent Operating Equipment, etc. excluding dredging activities for water supply features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment for non-Water Management activities: of project gates and specific water supply conduits; and permanent operating equipment. Prior to FY 07, these costs were included in WCC 61211.

SUB-ANNEX C-5  
SYSTEMS AND JUSTIFICATION OF ESTIMATES

**C-5.1 Operations and Maintenance Systems and Regions.** The PY O&M budget will be formulated on a system basis and, if Congress concurs on the benefit of planning and carrying out the O&M program in accordance with system-wide priorities, the O&M program would be managed by system and business line, rather than project-by-project. Operation and maintenance work funded in this manner will allow managers in the field more flexibility to address uncertainties and change conditions throughout the fiscal year, consistent with budget and appropriations decisions. The work is accomplished in the following water resource systems as delineated by watershed boundaries. Proposed PY funding will be consolidated according to Civil Works program areas, such as commercial navigation and flood damage reduction, for each of the systems as developed in the United States, using HUC sub-regions as established by the US Geological Survey. Specific projects that would receive funding in each system will also be identified by name.

**C-5-2. Narrative and Supporting Data.**

a. **Justification of Estimates Congressional Submission.** Each MSC shall prepare and submit *Justification of Estimate* sheets based on amounts provided by CECW-IP for the System, using a format to be provided in final form. To avoid illogical precision, no amounts should be rounded to less than \$1,000, using the 5/4 rule. This is a widely read document. To preclude misinterpretations by Congressional and other reviewers, do not use vague, stereotyped, descriptions in the Reason for Change and Maintenance Item column. Standard phraseology is acceptable, if used judiciously, such that the descriptions are clear and understandable to the reader. Be as specific as possible using a condensed version of what the testifying officer would answer if asked by the Sub-Committee the reason for changes from prior year. The tone of statements must reflect a full support of the President's Program request with no hints that amounts may not be adequate. Accordingly, a remark explaining higher amounts is preferable. The typed material in the body will be confined to 6 1/2 inches vertically and 10 inches horizontally, leaving 1/2 inch margins on the left and right sides and 0.607 inch margins at the top and bottom of an 11 X 8-1/2 inch page size. Justification sheets must be submitted as Microsoft Word documents over the Corps Outlook Electronic Mail. ASCII format is not acceptable because it deletes control codes for formatting. In addition, Project status maps are required for all Major Rehabilitation work that is being funded under the O&M, appropriation. To avoid allocation problems associated with roll-ups, projects spanning more than one district should be entered separately with titles showing the district name, for example:

OHIO RIVER LOCKS AND DAMS, PA (Pittsburgh Dist.)  
OHIO RIVER LOCKS AND DAMS, WV (Huntington Dist.)  
OHIO RIVER LOCKS AND DAMS, KY, IL, IN, OH, & WV (Louisville Dist.)

(Other projects include Ohio River Open Channel Work, McClellan-Kerr, Missouri River and the Upper Mississippi River or district-wide activities such as Inspection of Completed Works or Scheduling Reservoir Activities) If a state is included in more than one district, only the primary district should show that state in the title.

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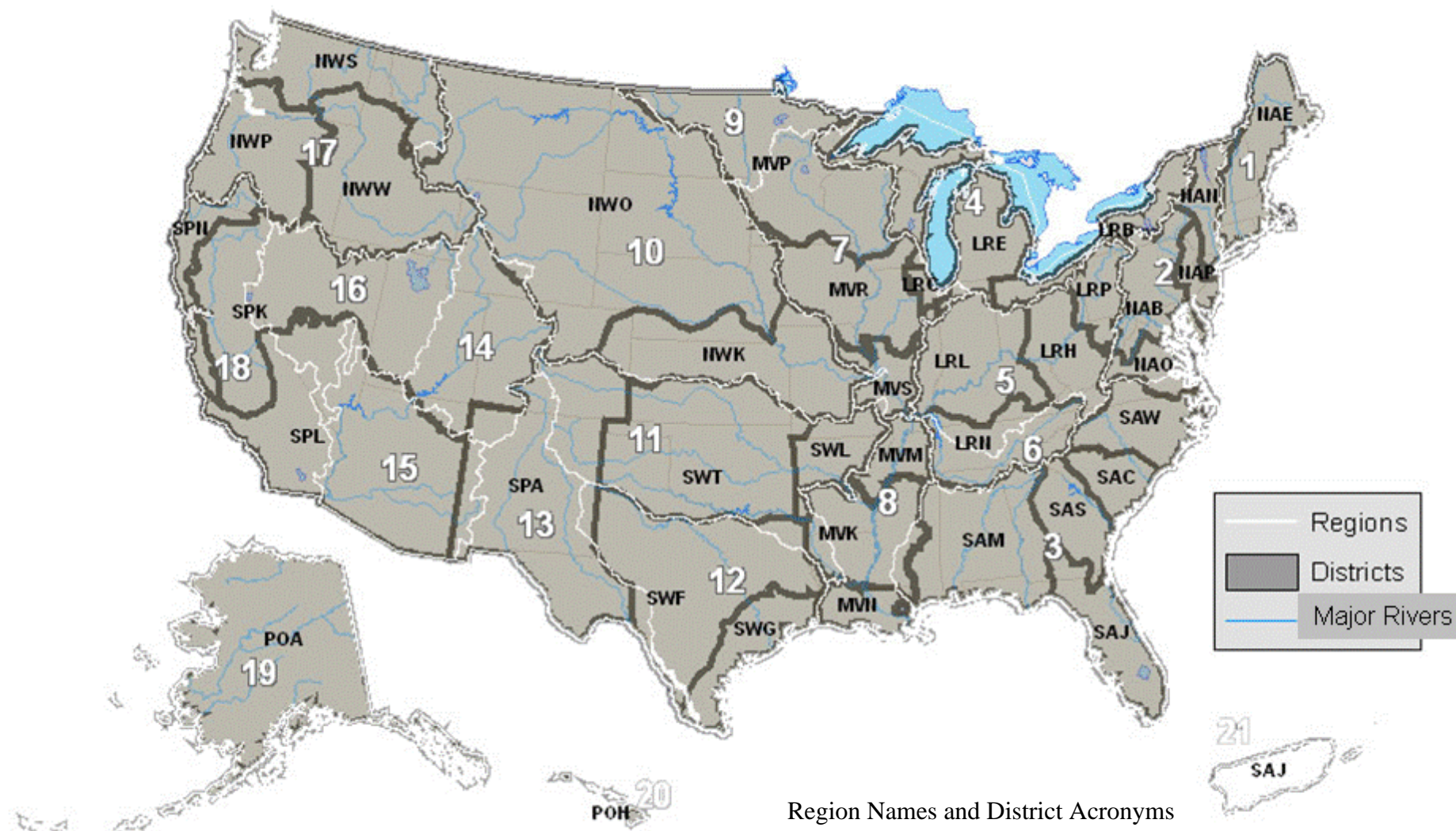
b. **State Designation for Inspection of Completed Works (ICW)**, Project Condition Surveys (PCS), Scheduling Reservoir Operations (SRO), Surveillance of Northern Boundary Waters (SNBW) and Inspection of Ecosystem Restoration Projects.

Each of these programs will have a budget activity per state per funding increment. In those cases where these programs are performed in more than one state, the district will have a budget activity for each state. The budget activities do not necessarily have to be in the same funding increment. For example, Little Rock District (SWL) has projects in Missouri and Arkansas therefore SWL should have at least two IWC budget activities, one for Missouri and one for Arkansas. Some SWL projects cross state lines such as Table Rock Lake. All the ICW for this project should be included for its primary state, which is Missouri. The justification/Remarks will indicate how many surveys, inspections, actions, etc. of that districts total will be performed for the respective Business Program funding increment. For example the Business Line initial increment ICW budget activity for SWL for Missouri would state five critical inspections would be conducted out of a total of 10 in the PY. Additional ICW budget activity(s) would be included in next-added Business Line increments as justified by increased performance or benefits.

C-5.3. **Definitions.** R=Reconnaissance; F=Feasibility; P=PED; C=Construction; CR=Replacement; O=Operations; M=Maintenance (regular, not major or rehab); MM=Major Maintenance; MR= Rehabilitation; OJ=Operation Joint Activities; MJ=Maintenance Joint Activities;



Table C-5.1  
Systems.xls



Region Names and District Acronyms  
are Listed on Following Pages

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The work is accomplished in the following water resource Systems as delineated by watershed boundaries (HUC sub-regions):

#### **GLOSSARY OF DISTRICT ACRONYMS**

LRB Buffalo District  
LRC Chicago District  
LRD Great Lakes & Ohio River Division  
LRE Detroit District  
LRH Huntington District  
LRL Louisville District  
LRN Nashville District  
LRP Pittsburgh District  
MVD Mississippi Valley Division  
MVK Vicksburg District  
MVM Memphis District  
MVN New Orleans District  
MVP St. Paul District  
MVR Rock Island District  
MVS St. Louis District  
NAB Baltimore District

NAD North Atlantic Division  
NAE New England District  
NAN New York District  
NAO Norfolk District  
NAP Philadelphia District  
NWD Northwestern Division  
NWK Kansas City District  
NWO Omaha District  
NWP Portland District  
NWS Seattle District  
NWW Walla Walla District  
POA Alaska District  
POD Pacific Ocean Division  
POH Honolulu District  
SAC Charleston District  
SAD South Atlantic Division

SAJ Jacksonville District  
SAM Mobile District  
SAS Savannah District  
SAW Wilmington District  
SPA Albuquerque District  
SPD South Pacific Division  
SPL Los Angeles District  
SPK Sacramento District  
SPN San Francisco District  
SWD Southwestern Division  
SWF Fort Worth District  
SWG Galveston District  
SWL Little Rock District  
SWT Tulsa District

The Flood Control, Mississippi River and Tributaries (MR&T) appropriation funds planning, construction, and operation and maintenance activities associated with projects to reduce flood damage in the lower Mississippi River alluvial valley below Cape Girardeau, Missouri. The entire MR&T area is included in the Lower Mississippi Region - The drainage of: (a) the Mississippi River below its confluence with the Ohio River, excluding the Arkansas, Red, and White River Basins above the points of highest backwater effect of the Mississippi River in those basins; and (b) coastal streams that ultimately discharge into the Gulf of Mexico from the Pearl River Basin boundary to the Sabine River and Sabine Lake drainage boundary. Includes parts of Arkansas, Kentucky Louisiana, Mississippi, Missouri, and Tennessee. Projects funded in the PY budget for operation, maintenance, and rehabilitation are as follows:

Arkansas

Helena Harbor, Phillips County, AR  
Inspection Of Completed Works, AR  
Lower Arkansas River, North Bank, AR  
Lower Arkansas River, South Bank, AR  
White River Backwater, AR

Illinois

Inspection Of Completed Works, IL

Kentucky

Inspection Of Completed Works, KY

Louisiana

Atchafalaya Basin, Floodway System, LA  
Atchafalaya Basin, LA  
Baton Rouge Harbor, Devil Swamp, LA  
Bayou Cocodrie And Tributaries, LA  
Bonnet Carre, LA  
Inspection Of Completed Works, LA  
Lower Red River, South Bank Levees, LA  
Mississippi Delta Region, LA  
Old River, LA  
Tensas Basin, Boeuf And Tensas Rivers,  
AR  
& LA  
Tensas Basin, Red River Backwater, LA

Missouri

Inspection Of Completed Works, MO  
St Francis Basin, AR & MO

Wappapello Lake, MO

Mississippi

Greenville Harbor, MS  
Inspection Of Completed Works, MS  
Vicksburg Harbor, MS  
Yazoo Basin, Arkabutla Lake, MS  
Yazoo Basin, Big Sunflower River, MS  
Yazoo Basin, Enid Lake, MS  
Yazoo Basin, Greenwood, MS  
Yazoo Basin, Grenada Lake, MS  
Yazoo Basin, Main Stem, MS  
Yazoo Basin, Sardis Lake, MS  
Yazoo Basin, Tributaries, MS  
Yazoo Basin, Will M Whittington Aux Chan,  
MS  
Yazoo Basin, Yazoo Backwater Area, MS  
Yazoo Basin, Yazoo City, MS

Tennessee

Inspection Of Completed Works, TN  
Memphis Harbor, Mckellar Lake, TN

Mississippi River Levees  
Revetments And Dikes  
Dredging

ILLUSTRATION C-5.2  
MAJOR SUBORDINATE COMMAND (MSC)  
SUPPLEMENTAL JUSTIFICATION SHEET  
MAJOR MAINTENANCE

(1) **DESCRIPTION OF WORK:** (Describe specific items of work to be included in the overall package.)

(2) **JUSTIFICATION:** (Provide justification for the total work to be accomplished, including economic evaluation. Quantify benefits when possible. In last paragraph of justification, provide arguments on why the work should be started in the program year, either design or construction; and the impact of not starting the work in the program year. For ongoing work, include the impacts of not continuing the work in the program year. These paragraphs must be in sufficient detail to permit a decision to be made on the investment.)

(3) **ESTIMATED COST AND SCHEDULE:** (Provide the basis of the estimated cost, i.e., based on cost of XYZ PROJECT IN FY 1990 indexed to current price levels, reconnaissance level estimate, e.g. *Design Memorandum D-28 approved 22 January 1993, etc*; and include the amount of contingencies included in the estimate. The cost estimate should be broken down to reflect individual DDRs, procurements, contracts, installations, etc. Schedule dates should be shown only to the month and year, e.g., 11/01, and all dollar amounts in even thousands, i.e., \$10,000 to be shown as 10. The estimate and schedule should include required fund requirements for engineering and design during construction and other related costs for completion of a total package. If contributed funds are required for Corps construction activities, include in cost estimate and add a line to the schedule with minus entries; so that the total line will reflect Total Federal fund requirements by year.)

This illustration is included to show the additional information required for major maintenance activities. This information will be provided in the format shown in the expanded funding argument field.

ILLUSTRATION C-5.3a  
MAJOR SUBORDINATE COMMAND  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, FY (PY)

**I. Navigation**

Channels and Harbors. The program estimate of \$ provides for essential operation and maintenance work on xx channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

**System XYZ.**

Projects funded in the PY budget for operation, maintenance, and rehabilitation are as follows:

<b>Connecticut</b>			<b>Maine</b>			<b>Rhode Island</b>		
Project A						Project C		
Project B			Project A			Project A		
Project C			Project B			Project B		
			Project C			Project C		
<b>Massachusetts</b>			<b>New Hampshire</b>			<b>Vermont</b>		
Project A						Project A		
Project B			Project A			Project B		
Project C			Project B			Project C		

1/ Projects funded in the PY budget for minimal operation and maintenance.

In addition, funding may be reallocated to the following projects that were included in the PY-1 budget, where necessary to complete a useful increment of work for which PY funding proves to be insufficient.

**Maine**

Maine Project 1  
Maine Project 2

**Massachusetts**

Massachusetts Project 1

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The PY budget includes funding for operation, maintenance, and rehabilitation in System XYZ by business line as follows:

<b>North Atlantic Division (NAD) (Dollars in Thousands)</b>				
Business Line Navigation  State/Project Name		FY (PY-1) Total  (operations) (Maintenance)	FY (PY) Total  (operations) (Maintenance)	Reason for Change and Major Maintenance Items  1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
<b>State 1</b>				
Project A	Total			
	O			
	M			
Project B	Total			
	O			
	M			
<b>State 2</b>				
Project A	Total			
	O			
	M			
Project B	Total			
	O			
	M			
<b>NAD Division Total in System</b>	Total			
	O			
	M			

ILLUSTRATION C-5.3a  
MAJOR SUBORDINATE COMMAND  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, FY (PY)

**I. Navigation**

Channels and Harbors. The program estimate of \$ provides for essential operation and maintenance work on xx channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

System XYZ

Projects funded in the PY budget for operation, maintenance and rehabilitation are as follows:

Project A Project B Project C	<b>District Of Columbia</b>	Project C 1/	<b>New Jersey</b>	Project A Project B Project C	
Project A 1/ Project B Project C	<b>Delaware</b>	Project A Project B Project C 1/	<b>New York</b>	Project A Project B Project C	<b>Virginia</b>
Project A Project B	<b>Maryland</b>	Project A Project B Project C 1/	<b>Pennsylvania</b>	Project A Project B Project CMD & Wv	<b>West Virginia</b>

1/ Projects funded in the PY budget for minimal operation and maintenance.

In addition, funding may be reallocated to the following projects that were included in the PY-1 budget, where necessary to complete a useful increment of work for which PY funding proves to be insufficient.

**Maryland**  
Maryland Project 1

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**System XYZ - Continued**

The PY budget includes funding for operation, maintenance, and rehabilitation in System XYZ by business line as follows:

<b>Great Lakes and Ohio River Division (LRD) (Dollars in Thousands)</b>				
Business Line Navigation		FY (PY-1) Total	FY (PY) Total	Reason for Change and Major Maintenance Items
State/Project Name		(operations) (Maintenance)	(operations) (Maintenance)	1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
<b>State 1</b>				
Project A	Total			
	O			
	M			
Project B	Total			
	O			
	M			
<b>State 2</b>				
Project A	Total			
	O			
	M			
Project B	Total			
	O			
	M			
<b>LRD Division Total in System</b>	Total			
	O			
	M			

**System XYZ - Continued**

The PY budget includes funding for operation, maintenance, and rehabilitation in System XYZ by business line as follows:

<b>North Atlantic Division (NAD) (Dollars in Thousands)</b>				
Business Line Navigation  State/Project Name		FY (PY-1) Total  (operations) (Maintenance)	FY (PY) Total  (operations) (Maintenance)	Reason for Change and Major Maintenance Items  1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
<b>State 1</b>				
Project A	Total			
	O			
	M			
Project B	Total			
	O			
	M			
<b>State 2</b>				
Project A	Total			
	O			
	M			
Project B	Total			
	O			
	M			
<b>NAD Division Total in System</b>	Total			
	O			
	M			

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**System XYZ - Continued**

The PY budget includes funding for operation, maintenance, and rehabilitation in System XYZ 2 by business line as follows:

System XYZ Total				
Business Line Navigation		FY (PY-1) Total  (operations) (Maintenance)	FY (PY) Total  (operations) (Maintenance)	Reason for Change and Major Maintenance Items  1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
System XYZ Total	Total			
	O			
	M			

ILLUSTRATION C-5.3b  
MAJOR SUBORDINATE COMMAND  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, FY (PY)

**2. Flood Control**

a. **Reservoirs: Scheduling Reservoir Operations.** The \$       requested in FY (PY) supports preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions, and the issuance of gate regulation instructions as necessary at non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

**System XYZ**

Projects funded in the PY budget for operation, maintenance and rehabilitation are as follows:

Arkansas	Louisiana	Texas
Colorado	Missouri	
Kansas	Oklahoma	

1/ Projects funded in the PY budget for minimal operation and maintenance.

In addition, funding may be reallocated to the following projects that were included in the PY-1 budget, where necessary to complete a useful increment of work for which PY funding proves to be insufficient.

**Arkansas**

Arkansas Project 1  
Arkansas Project 2

**Texas**

Texas Project 1

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The PY budget includes funding for Scheduling Reservoir Operations in System XYZ as follows:

<b>Southwestern Division (SWD) (Dollars in Thousands)</b>			
Business Program Flood Control Scheduling Reservoir Operations State/Project Name	FY (PY-1) Total  (operations) (Maintenance)	FY (PY) Total  (operations) (Maintenance)	Reason for Change and Major Maintenance Items  1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
Arkansas			
Colorado			
Kansas			
Louisiana			
Missouri			
Oklahoma			
Texas			
<b>SWD Division Total in System</b>			

b. **Channel Improvement: Inspection of Completed Works.** The \$            requested in FY (PY) supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, flood walls, drainage structures and pumping plants.

The PY budget includes funding for Inspection of Completed Works in System XYZ as follows:

<b>Southwestern Division (SWD) (Dollars in Thousands)</b>			
Business Program Flood Control Inspection of Completed Works State/Project Name	FY (PY-1) Total  (operations) (Maintenance)	FY (PY) Total  (operations) (Maintenance)	Reason for Change and Major Maintenance Items  1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
Arkansas			
Colorado			
Kansas			
Louisiana			
Missouri			
Oklahoma			
Texas			
<b>SWD Division Total in System</b>			

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ILLUSTRATION C-5.3c  
MAJOR SUBORDINATE COMMAND  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, FY (PY)

**4. Protection of Navigation**

a. **Project Condition Surveys.** The \$ requested in FY (PY) supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the program request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that users can be advised of channel conditions and future maintenance can be scheduled.

**System XYZ**

Projects funded in the PY budget for operation, maintenance and rehabilitation are as follows:

Illinois	Minnesota	Pennsylvania
Indiana	New York	Wisconsin
Michigan	Ohio	

1/ Projects funded in the PY budget for minimal operation and maintenance.

In addition, funding may be reallocated to the following projects that were included in the PY-1 budget, where necessary to complete a useful increment of work for which PY funding proves to be insufficient.

**Indiana**

**Indiana** Project 1

**Indiana** Project 2

**New York**

New Yorks Project 1

The PY budget includes funding for Scheduling Reservoir Operations in System XYZ as follows:

<b>Great Lakes and Ohio River Division (LRD) (Dollars in Thousands)</b>			
Business Program Protection of Navigation Project Condition Surveys State/Project Name	FY (PY-1) Total  (operations) (Maintenance)	FY (PY) Total  (operations) (Maintenance)	Reason for Change and Major Maintenance Items  1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
Illinois			
Indiana			
Michigan			
Minnesota			
New York			
Ohio			
Pennsylvania			
Wisconsin			
<b>LRD Division Total in System</b>			

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**b. Surveillance of Northern Boundary Waters.** The \$       requested in FY (PY) supports meeting US obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.

The PY budget includes funding for Surveillance of Northern Boundary Waters in System XYZ as follows:

<b>Great Lakes and Ohio River Division (LRD) (Dollars in Thousands)</b>			
Business Program Protection of Navigation Surveillance of Northern Boundary Waters State/Project Name	FY (PY-1) Total  (operations) (Maintenance)	FY (PY) Total  (operations) (Maintenance)	Reason for Change and Major Maintenance Items  1. Reasons for change in Operations from PY-1 to PY (10% +/-) 2. Major Maintenance Items Programmed in PY (Threshold \$3,000,000)
Illinois			
Indiana			
Michigan			
Minnesota			
New York			
Ohio			
Pennsylvania			
<b>LRD Division Total in System</b>			